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THE EDUCATION OF WOMEN

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THE EDUCATION OF WOMEN

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TO MY FRIEND AND ASSOCIATE OF FIFTEEN YEARS

SOPHONISBA PRESTON BRECKINRIDGE

WHOSE SUGGESTION LED TO THE MAKING OF THIS BOOK

AND WHOSE GENEROUS SYMPATHY AND WISE COUNSEL

HAVE BEEN MY UNFAILING SUPPORT IN THIS

AS IN ALL MY UNDERTAKINGS

PREFATORY NOTE

The present study is presented in the belief that current discussion of educational aims and methods does not adequately take into account the needs of girls and women. There is undoubtedly some truth in both of the opposing views, on the one hand, that education of women should be determined principally by their function in perpetuating the life of the race, and, on the other hand, that as the laws of mind are identical for the two sexes the education of women should be the same as that of men.

It is true that in the past the activities of women have been chiefly concerned with the provision of food and clothing and with the comfort and daily well-being of the young of the group within the home. Such duties now require, not simply sound physical life and strong sex impulse, but large capacity for administration, the ability and the knowledge to enter the industrial and business life of the group, and the power to utilize governmental agencies for constructive purposes of well-being. It is also true that the educational system as now devised for boys and men is properly

affected by considerations of a social, economic, and commercial kind as well as by the acknowledged principles of psychology. So far then as the social and economic arrangements of society allot to men and women different tasks, so far must the educational machinery be developed differently for the two sexes. That both shall be treated according to sound psychological principles, while to each is given the opportunity for being trained for such social tasks as await the well-equipped member of a modern democratic community, is the ideal to be sought.

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PART I

WOMEN'S ACTIVITIES, PAST AND PRESENT

CHAPTER I

INTRODUCTORY

The changes which have taken place during the past century in the activities and position of women are the object of an interest which is widespread. These changes have been so striking that the period during which they occurred is frequently called the "woman's century." Nor is the movement a completed one; there is every reason to believe that equally marked changes will take place in the century to come. The time has passed when women were on the whole content to drift with the current of life and accept without question or demur the lot which tradition, custom, and public opinion might dictate. The little band of leaders who did pioneer work in the last century in claiming and making new opportunities for women did brave service: in no respect did they do better service than in showing the value of ideals as a positive social force. The record of their lives will always be a source of courage to increasing numbers of women who will be eager to take an active part in controlling and directing the stream of women's activities.

A wise attempt to shape a movement must take into account the steps which have preceded. A glimpse into the past and an outlook upon the present are a fitting prelude to an endeavor to determine the future. For this purpose the following descriptions are given of the occupations and life of girls of the older time, together with a sketch of what the life might be of a girl and a woman of the present time.

In 1771, Anna Green Winslow, a ten-year-old girl, was sent by her guardians from her home in Nova Scotia to her aunt in Boston to be "finished." During the winter of 1771–72 she kept, for the benefit of her far-away family, a journal, which has been preserved.[1] In this journal she portrayed her daily life with rare charm and perfect unconsciousness of self, so that we have a graphic and exquisite account of the life of a well-bred Boston schoolgirl of that time. The journal is pervaded with delicious youthful vanity, and is often of a "frankly frivolous" character, though lacking any touch of artificiality. The little girl thought first of how she should be clothed; the subject second in importance was her soul's welfare—she was a very pious little person, a member of the Old

[1] *Diary of Anna Green Winslow, a Boston School Girl of 1771*, edited by Alice Morse Earle.

South Church. She was industrious and active in housewifery accomplishments, and was trained to take her place as part of the industrial system of which she would become a member, a system in which there was division of labor largely based on sex, because based on the family organization.

I have spun [she writes, February 22, 1772] 30 knots of linning-yarn, and (partly) new-footed a pair of stockings for Lucinda, read a part of the *pilgrim's progress*, coppied part of my text journal, play'd some, tuck'd a great deal (Aunt Deming says it is very true), laugh'd enough, and I tell aunt it is all human *nature*, if not human reason.

On March 9 she writes:

I think this day's work may be called a piece-meal for in the first place I sew'd on the bosom of unkle's shirt, mended two pair of gloves, mended for the wash two handkerchiefs (one cambrick), sewed on half a border of a lawn apron of aunts, read part of the XXIst chapter of Exodus, and a story in the *Mother's Gift*. Now, Hon'd Mamma, I must tell you of something that happened to me to-day, that has not happen'd before this great while, viz., My Unkle and Aunt both told me, I was a very good girl.

She was an accomplished as well as a "strangely industrious little piece of femininity." She learned "dancing, or danceing, I should say," and attended a writing-school

to acquire that most indispensable and most appreciated of eighteenth-century accomplishments—fine penmanship.

She read much, the Bible constantly, and also a "variety of other composures." Her instincts and habits were friendly and social, and she spent much time in visiting brides, babies, and old folks.

A view of her education would be incomplete if the training she received from listening to sermons or to discussion about them should be ignored. Her Bible reading was full of significance to her. On March 11 she writes:

> Boast not thyself of tomorrow; for thou knowest not what a day may bring forth. Thus king Solomon, inspired by the Holy Ghost, cautions, Pro. XXVII, I. My aunt says, this is a most necessary lesson to be learn'd and laid up in the heart. I am quite of her mind. I have met with a disappointment to-day, and aunt says, I may look for them every day—we live in a changing world—in scripture call'd a vale of tears.

When she was twelve she was regarded as "finished," and "came out," being invited to a succession of prim little routs, or parties, which she called "constitutions."

If the results of her training be summed up, she is found to be an excellently educated little person, ready to take her place in the family,

which, as has been said, constituted the industrial organism of the day; prepared for social life by her reading, writing, dancing, and the ease of manner which comes from constant intercourse with gentle people in the ordinary human experiences. When to these is added the preparation which she had received for participation in church life, a life covering activities now known as religious and philanthropic, it is evident that she was indeed well educated, lacking development only on the aesthetic side—the latest to be emphasized in any community—and the political, of which she does not speak.

Another example may be cited showing more specifically, however, the kinds of industries which occupied the time and tested the skill of young women in the earlier years of American life.

In 1775, Abigail Foote of Connecticut wrote in her diary[1] of the pursuits she followed:

Fix'd gown for Prude—Mend Mother's Riding-hood,—Spun short thread,—Fix'd two gowns for Welsh's girls,—Carded tow,—Spun linen,—Worked on Cheese-basket, Hatchel'd flax with Hannah, we did 51 lbs. a-piece,—Pleated and ironed,—Read a sermon of Doddridge's,—Spooled a piece,—Milked the cows,—Spun linen, did 50 knots,—Made a Broom of Guinea-wheat straw,—Spun

[1] E. C. B. Buel, *The Tale of the Spinning Wheel*, p. 56.

thread to whiten,—Set a Red dye,—Had two scholars from Mrs. Taylor's,—I carded two pounds of whole wool and felt Nationly,—Spun harness twine, scoured the pewter.

Nearly one hundred and forty years later a little girl's diary might give this record: She missed breakfast because she had to hurry to get the school automobile, which will not wait. The boys and girls in her grade gave a scene showing the Siege of Troy to the whole school. The children wrote it and made their costumes. Next they are going to study how people lived in Rome. It was "mothers' day" in the cooking-class and they all came to luncheon after the play, except her mother, who had to read a paper at the Woman's Club. She helped prepare the grapes and oranges for the fruit salad. She learned a new step in the physical culture class. After school a Toboggan Club was formed and she was made treasurer. The cook left, so her father took the family to his club to dinner and then they all stayed to see the Christmas revels.

The older woman's story of a day may be like this: She did some telephoning—market, stockings for the children, a piece of silver to be sent as a wedding present, employment agency (no waitress in sight yet). She signed a contract

with the Vacuum Cleaning Company to keep the house clean for a year. She went to a meeting called to agitate for electrification of the railroad. She saw Mrs. Eager and told her she would serve as a director of the Reformed Nurses Association. Lunched with the Every Week Club, where the tenement problem was discussed. After the symphony concert she went to a tea given to introduce Mrs. Smith's third daughter. In the evening she attended a dramatic festival given for the benefit of the Retired Artists Home.

Many other sketches concerning different groups of women might be given, but these illustrations indicate the changes which have occurred in the occupations and interests of women. These changes are along the lines of industrial pursuits, education, civic responsibilities, philanthropy, domestic duties, and social life. These will be described more fully in succeeding chapters.

CHAPTER II

THE INDUSTRIAL AND COMMERCIAL CHANGE

The change in the interests of women which is most striking is that due to the industrial revolution or the introduction of the factory system. The removal of household industries from the home to the factory has gone on rapidly, until the process has been completed in the case of spinning, weaving, shoemaking, tailoring, candle dipping, preparing drugs, and numerous other activities. Sewing, baking, preserving food, cooking in different forms are disappearing. It is only a few years since all women's and children's clothing had to be made in one's own home, and nearly every stage in the preparation of food had to be carried on in one's own kitchen. This process of removal would, however, be a more rapid one were not women, and the men of their families as well, often held in bondage to the idea that the permanence and sanctity of the home depend upon the retention of sewing and cooking within its walls; in such households all interests, even those of the children, are often subordinated to the demands of the kitchen.

But, though retarded, the process has continued until only the remnants of these occupations remain, so that if the house is now a workshop, it is frequently one hardly worthy of the name, so much of the work that is retained being unskilled or "belated."

With these unimportant exceptions the home has ceased to be a center of production, and women workers have followed their work out of the home into the factory. Besides this they have begun to participate in many processes of trade and other wage-earning occupations which have developed incident to the factory system, in connection with which their work has received less attention than when carried on in the factory itself.

The list of occupations scheduled by the Twelfth Census (1900) contains 303 separate employments, in 295 of which women are found. The only employments in which there are no women scheduled are United States soldiers, sailors, and marines, street-car drivers, and fire-department firemen. An analysis of the figures shows that in 1900 over five million women were gainfully employed out of a population of twenty-eight million women over ten years of age. These were divided among five great occupational groups as follows: agricul-

ture, 977,336; professional service, 430,597; domestic and personal service, 2,095,449; trade and transportation, 503,347; manufacturing and mechanical pursuits, 1,312,668.

There were, however, only eighteen occupations each of which employed 1 or more than 1 per cent. of the total number of women gainfully employed, and these eighteen together employed 86.8 per cent. of the total. These occupations and the number of women employed in them are:[1]

Agricultural laborers	663,209
Farmers, planters, and overseers	307,706
Musicians and teachers of music	52,359
Teachers and professors in colleges	327,614
Boarding- and lodging-house keepers	59,455
Housekeepers and stewardesses	146,929
Laundresses	335,282
Nurses and midwives	108,691
Servants and waitresses	1,283,763
Bookkeepers and accountants	74,153
Clerks and copyists	85,246
Saleswomen	149,230
Stenographers and typewriters	86,118
Cotton-mill operatives	120,603
Dressmakers	344,794
Milliners	86,120
Seamstresses	146,105
Tailoresses	68,935

[1] Edith Abbott and Sophonisba P. Breckinridge, "Employment of Women in Industries," *Journal of Political Economy*, January, 1906.

When these figures are compared with those of 1890, it is found that in four occupations there is a decrease of women employed as compared with the population, and these occupations are the ones which are popularly supposed to belong to women, viz., dressmakers, seamstresses, tailoresses, servants and waitresses.

Of the other fourteen occupations in this group, one, "stenographers and typewriters," had more than tripled its numbers; three others—"saleswomen," "bookkeepers and accountants," and "nurses and midwives"—had more than doubled; four—"musicians and teachers of music," "boarding- and lodging-house keepers," "housekeepers and stewardesses," and "laundresses" had increased by more than one-half. What seems most significant is that no one of the occupations showing a marked increase lies within either the manufacturing or the agricultural group. Since it is the other groups which are most likely to attract middle-class women, there would seem to be again an indication that increase in the gainfully employed is due to employment of women of the middle class rather than to any change in proportion among women of the working classes.[1]

It is also interesting to note that, contrary to the popular belief, men are increasing more rapidly in industrial pursuits than women.[2] In the early half of the last century the number of women in proportion to the number of men

[1] Edith Abbott and Sophonisba P. Breckinridge, *op. cit.*

[2] Edith Abbott, *Women in Industry*, p. 4.

employed in American industry was larger than it is today. But the fact that nearly a million and a half women and nearly six million men are engaged in manufacturing pursuits outside of their homes, and that the numbers are steadily increasing, shows the change in the industrial system. The proportion of women who are engaged in making articles for ordinary use is not as large as formerly, and those who are thus engaged are for the most part doing it in factories and shops.

Because of this change, women have now the great function of directing how the products of other people's labor shall be consumed. It is estimated that the consumption of 95 per cent. of the world's goods is directly controlled by women, and the center of this consumption is the home. This is a new and serious responsibility, requiring a training quite different from that demanded by the woman who distributed among the members of her family the products of her own and their labor. To meet this responsibility a reading of the daily papers to learn where bargains may be had, blind credence in labels, or skill in keeping up with the fashions is surely not adequate preparation.

Such training should include a knowledge of fabrics and other materials, of methods of

production, of laws governing different industrial processes, of standards of fitness in the article and of efficiency in the workman. It should also include such an appreciation of human needs as will help determine the conditions under which goods are produced, and will demand workshops free from disease, prohibition of child labor, reasonable hours and decent wages for the workman, and simplicity, beauty, utility, and genuineness in every product. At the present time girls are receiving no training to meet these new duties commensurate with their importance, and it is not strange that most women are the slaves of the manufacturer even to the extent of having the size of their hats and the shape of their bodies determined for them, or that shops are crowded with useless, tawdry, inartistic goods.

Fortunately there are some who see ways of serving as an intelligent directive power in this field. The Consumer's League and the Woman's Trade Union League are instances of experiments in this direction. A more general appreciation of the interests involved will undoubtedly lead to methods still more effective than these.

CHAPTER III

THE EDUCATIONAL CHANGE

New educational standards for women form another influence which has been at work affecting their position and interests. In the first half of the eighteenth century fewer than 40 per cent. of the women of New England who signed legal papers wrote their name; the others made their mark.[1]

The "dame school" provided a few crumbs of learning for the girls. Mrs. John Adams in her letters says that female education in the best families went no farther than writing and arithmetic, and it was fashionable to ridicule female learning.[2]

Girls were not admitted to the public schools of Boston until 1769. It was not until 1852 that a public high-school education of any kind was available to Boston girls, and the opening of the Girl's Latin School in 1878 gave them their first opportunity to be fitted for college. In Philadelphia no girls could be prepared for college in the public schools before 1893.

[1] G. H. Martin, *The Evolution of the Massachusetts Public School System*, New York, 1894, p. 75.

[2] Quoted from B. A. Hinsdale, *The Training of Teachers.*

Although the facilities for advanced public education were thus slowly developed, the movement for the establishment of private academies and seminaries for girls was a part of the general educational revival in the early part of the nineteenth century.[1] Free elementary and secondary schools were established quite generally in the few decades preceding the Civil War. The employment of women teachers in comparatively large numbers can be traced to the effects of the Civil War, which made heavy drafts on men for other forms of service. The opening of higher institutions of learning to women began in 1833 with the founding of "Oberlin Collegiate Institute," which from the beginning admitted women as well as men. Antioch College followed in 1853, and the state universities beginning with Utah in 1850 have all opened their doors to women, with the exception of Florida, Georgia, and Virginia. In many colleges and universities women hold teaching positions, although as yet mostly of inferior rank, always with slow promotions, and frequently with salaries lower than those given to men of the same rank. A large number of fellowships are open to women, some even in

[1] Ida M. Tarbell, "The American Woman," *American Magazine*, December, 1909.

institutions primarily for men, as Yale University and the University of Pennsylvania.

As late as 1882, when sixty-six women from eight different colleges organized the Association of Collegiate Alumnae, they met as pioneers determined to advance educational standards and to give aid, counsel, and encouragement to the few scattered girls who were longing for sympathy as they pressed forward to take advantage of new opportunities. The movement for collegiate education met with difficulties and obstacles at every point. One after another they have been removed. First, it was claimed that woman's brain was incapable of intellectual training. The roll of honor scholarships and of memberships in Phi Beta Kappa and of doctorates is the answer to this claim. Next, the physical unfitness of women was urged. It was soon learned that regular mental work was an aid, not a detriment, to health. Another peril was prophesied—women would become unsexed, would lose in womanly grace and charm. It is true the Gibson girl has replaced the steel-engraving lady, the golf-sticks and the social settlement the harpsichord and the *Mysteries of Udolpho*, but the change is general and not limited to college women.

There still remained the terror of having

women enter a field which man had pre-empted. This is typified by the story of the little boy and girl who were playing together. Robert, aged five, found a piece of bamboo which he began to play was a cigarette. Alice, aged three, attempted to do the same thing. "Stop smoking, Alice!" said Robert. Persistence on Alice's part. "Alice, I said 'Stop smoking.'" Continued indifference on Alice's part to Robert's commands. "Alice, you just stop smoking. I am doing it to play I'm a man, and it's no fun if you do it too."

In the face of these objections, the movement proceeded with a force which marked it as one of the great characteristics of the last century, and made it a contribution of the United States to civilization which has aroused the admiration of the world.

The number of girls eager to take advantage of these new opportunities increased with astounding rapidity,[1] and, in some places it has been feared that collegiate training would be dominated by women. This is illustrated by the following: A little boy of six years had five sisters older than he. Two of them were fitting for college, two were in college, one had

[1] In 1907–8, there were 33,198 women in 321 coeducational colleges alone.

just graduated. A friend said: "Alfred, are you going to college?" The little fellow stood up very straight, with his hands in his pockets, and said: "No, *I* am going to be a man!"

The public has looked with interest on certain recent policies which have seemed distinctly reactionary. There is danger of exaggerating their significance. Whatever modifications may be made as to limiting the number in an institution, as in Leland Stanford Jr. University, or giving instruction in certain elementary courses separate from men, as in the University of Chicago, or even refusing longer to grant them admission, as in Wesleyan University, the principle has been established and will never be sacrificed, that women shall have, if they wish it, the best intellectual training the world knows.[1] They have proved their fitness for it by reaching to the recognized intellectual standard of the human race—the intellectual standard of men. The following data concern the rank of men and women who have taken the degree of Doctor of Philosophy at the University of Chicago prior to July, 1909:

[1] Of the 4,377 members of the Association of Collegiate Alumnae (1909) who had received the Bachelor's degree, 579, or 13.2 per cent., had also received the Master's degree and 144, or 3.3 per cent., the degree of Doctor of Philosophy.

Grade	No. of Men	Percentage	No. of Women	Percentage
Rite	92	21.2	9	11.2
Cum laude	145	33.4	33	41.3
Magna cum laude	174	40.1	32	40.0
Summa cum laude	23	5.3	6	7.5
Totals	434		80	

Women constituted 15.6 per cent. of the total Doctors; 8.9 per cent. of the *rite* grade; 10.8 per cent. of *cum laude;* 15.5 per cent. of *magna cum laude*, and 20.7 per cent. of *summa cum laude.*[1]

Every effort to close the door of scholarship to women or to make the approaches to it more difficult can be traced with more or less directness to eastern conservatism or to European traditions. The nation is too big and brave and just to retreat permanently from any position it has once taken in behalf of the rights of any class in society.

[1] Such a theory as the following is evidently formulated in entire ignorance of actual facts:

"Supreme in acquisition, unequaled in transmission and distribution, when it comes to this distinctively creative act, this organizing of facts in the light of the universal principles which bind them into systematic unity, women, as a rule, have far less of this essential of productive scholarship than men. The very tendencies which make them win their share of the prizes in the high school and the receptive college courses become their handicap when they enter the graduate school."—W. D. Hyde, *The College Man and the College Woman*, p. 207.

Women have proved their ability to enter every realm of knowledge. They must have the right to do it. No province of the mind should be peculiarly man's. Unhampered by traditions of sex, women will naturally and without comment seek the intellectual goal which they think good and fit. The logical outcome of the present status of woman's education will be intellectual freedom on an individual basis.

The following figures taken from the *Report of the United States Commissioner of Education for 1907–8* measure in part the force of this educational movement:

SCHOOL ENROLMENT OF 1906–7 IN THE UNITED STATES

Boys	8,473,921
Girls	8,416,897

TEACHERS

Men	104,414
Women	376,902

ENROLMENT IN THE KINDERGARTEN AND ELEMENTARY GRADES IN CERTAIN CITIES AND VILLAGES OF 4,000 TO 8,000 POPULATION

Boys	231,802
Girls	233,711

SUPERVISING OFFICERS

Men	795
Women	412

TEACHERS

Men	1,928
Women	16,430

ENROLMENT IN CITIES OF 8,000 POPULATION AND OVER IN 1907–8

SUPERVISING OFFICERS

Men	2,945
Women	3,246

TEACHERS

Men	9,822
Women	106,085

In public high schools—

TEACHERS

Men	16,670
Women	18,729

STUDENTS (SECONDARY)

Boys	327,803
Girls	442,653

In manual- and industrial-training schools—

INSTRUCTORS IN MANUAL ARTS

Men	1,156
Women	616

STUDENTS (SECONDARY)

Boys	37,388
Girls	21,115

In commercial and business schools—

INSTRUCTORS

Men	1,979
Women	1,386

STUDENTS

Men	82,921
Women	72,042

In evening schools—

TEACHERS

Men	3,218
Women	4,829

ELEMENTARY CLASSES

Men and Boys	154,479
Women and Girls	61,410

SECONDARY CLASSES

Men and Boys	31,344
Women and Girls	16,628

VOCATIONAL CLASSES

Men and Boys	20,783
Women and Girls	26,400

ENROLMENT IN 321 UNIVERSITIES, COLLEGES, AND TECHNOLOGICAL SCHOOLS OPEN TO BOTH SEXES

INSTRUCTORS

In preparatory departments, women	1,219
In collegiate departments, women	1,389

STUDENTS (COLLEGIATE)

Men	65,667
Women	33,198

ENROLMENT IN COLLEGES FOR WOMEN

(DIVISION A)

Students	7,977

(DIVISION B)

Students	11,573

ENROLMENT IN COLLEGES OF AGRICULTURE AND MECHANICAL ARTS

TEACHERS

Men	4,774
Women	638

STUDENTS

Men	51,728
Women	17,111

ATTENDANCE OF WOMEN IN PROFESSIONAL SCHOOLS

	No. of Schools	Not Open to Women	Attended by Women
Divinity	156	121	35
Law	108	54	54
Medicine	149	56	93
Dentistry	55	21	34
Pharmacy	75	23	52

ENROLMENT IN PROFESSIONAL SCHOOLS

THEOLOGY

Men	9,033
Women	550

LAW

Men	17,690
Women	379

MEDICINE

Men	21,872
Women	915

DENTISTRY

Men	6,412
Women	107

PHARMACY

Men	5,327
Women	240

Enrolment in Public Normal Schools

TEACHERS

Men	1,516
Women	2,476

STUDENTS IN NORMAL DEPARTMENTS

Men	13,258
Women	30,808

Enrolment in Private Normal Schools

TEACHERS

Men	515
Women	506

STUDENTS IN NORMAL DEPARTMENTS

Men	2,888
Women	4,913

ENROLMENT IN SCHOOLS FOR TRAINING OF PROFESSIONAL NURSES

CLASS A

Men	348
Women	22,100

CLASS B

Men	1,032
Women	2,421

The following are some of the most striking facts shown by these statistics:

Of the teaching staff in the school enrolment of the United States, 78 per cent. are women.

Of the teaching staff in the high schools, 56 per cent. are women, and of the students 57 per cent. are girls.

Of the supervising officers 52 per cent. and of the teachers 91 per cent. in cities of 8,000 population and over are women.

Of the teachers 35 per cent. and of the students 36 per cent. in manual- and industrial-training schools are women.

In vocational evening schools there are 6,000 more women and girls than men and boys.

Of the teachers 41 per cent. and of the students 46 per cent. in commercial and business colleges are women.

Of the collegiate students in universities, col-

leges, and technological schools open to both sexes 34 per cent. are women.

One-quarter of the students in colleges of agriculture and mechanical arts are women.

Out of 543 professional schools 268 are attended by women.

It requires but little knowledge or imagination to draw from these astounding figures some conception of their significance. It is clear that girls and women are using with avidity every educational opportunity open to them.

CHAPTER IV

THE CIVIC CHANGE

The new industrial era and the increased facilities in transportation are agencies which have led to a remarkable development of urban life. The total population of the United States in 1790 was 3,929,214, of whom 131,472 people, or 3.35 per cent., lived in towns of 8,000 inhabitants and over, and the number of such towns was only 6. In 1900 the population was 76,303,387, of whom 24,992,199, or 33.1 per cent., lived in such towns, and the number of the towns had increased to 545.

In the decade from 1890 to 1900 the total population increased 20.7 per cent., and the urban population 37 per cent.

This immense movement has brought both gains and losses. The gains are enumerated by a recent writer[1] as culture, enlightenment, education, along with industry and commercial opportunity, all tending to the creation of the spirit of modern democracy which will not long tolerate the loss account which is sum-

[1] Frederick C. Howe, *The City the Hope of Democracy*, pp. 24–42.

marized as complexity, dependence, poverty, misery, vice, and disease.

This development of urban life has very largely modified the activities and responsibilities of women. There has been an immense increase in the use of hotels, flats, tenements, boarding- and lodging-houses. The family homestead is unknown in the modern city. Private ownership of homes is rapidly disappearing. At the time of the Twelfth Census there were 722,670 homes in Greater New York, of which only 83,052 were owned by their occupants, and of these 48,002, or 58 per cent., were mortgaged. In one Assembly district in New York out of 14,000 homes only 56 were occupied by the owners, and of these all but 14 were encumbered.[1]

Groups of families thus living together in cities have found it necessary to provide a common supply of water and of light, to co-operate in disposal of wastes, and in control of food supplies, buildings, plumbing, contagious diseases, and care of the sick, the infirm, the insane, and the criminal, and to regulate many other household and family affairs which formerly were directed solely by the individual householder. The result has been to lessen materi-

[1] Howe, *op. cit.*, pp. 194, 195.

ally the amount of work demanded of the woman in the home in order to meet certain physical needs of her family. But the result is not to free her from responsibility; on the contrary, there arises here a new duty for women, that of intelligently and effectively co-operating with the other members of the community for the welfare of the individual households. The right education gives women not only specific knowledge, but vigor and breadth of view, discipline of character, and a freedom of mind which comes from the scientific attitude. And all of these powers are needed from men and women alike in the formation and development of those processes by which in a political democracy provision is made for the well-being of the separate households. It has been said that the home does not stop at the street door—it is as wide as the world into which the individual steps forth.

The determination of the character of that world and the preservation of those interests which she has safeguarded in the home constitute a real duty resting upon woman. This means the control over the streets, the schools, the street-car, the shop, the park, the public library, the art gallery, the theater, the very air itself. In the words of Mr. Howe:

> A large part of the uplift which has come to our cities in recent years is traceable to the activity of women. To woman the city is more than an incidental problem. It touches her in a thousand ways. No one suffers more from bad government than does she, and no one is more interested in good government. Moreover, municipal administration is a housekeeping agency. . . . . To man the city is primarily a center of industry. Women, on the other hand, see the city in the light of the home. The vice, the saloons, the schools, the libraries, the water, gas, and transportation questions are to her questions of the family, of the child, questions of comfort, of happiness, of safety.[1]

The intelligent woman recognizes that no household is any longer independent. She sees that the conditions which she desires for her own household are in large part determined by the community as a whole. She leads in the public demand that every improvement which modern science can provide shall be incorporated in the activities of the city. She demands clean streets, parks, and playgrounds, sanitary laws and inspection, public baths, libraries, kindergartens, vacation schools and manual training, pure food and water, protection from contagious diseases and well-equipped hospitals, juvenile courts and model tenements, municipal art and civil service.

[1] Howe, *op. cit.*, p. 175.

CHAPTER V

THE PHILANTHROPIC CHANGE

Because of her temperamental characteristics, there is one activity which has seemed to belong peculiarly to women: that of exercising kindness and showing sympathy to the suffering, the poor, and the afflicted. Members of religious orders and ladies of wealth and position alike have devoted themselves to works of mercy and benevolence. In the past these activities were conducted in a personal way, and were determined by the strength of the appeal and the benevolence of the almsgiver. In recent years the indiscriminate giving of doles passed under the name of charity and became among women a special means of displaying generosity, pity, sympathy, and kindheartedness. So deeply rooted did this custom become that it grew to be accepted in large measure as adequate expression of the instinctive desire of women to "do good." Gradually, however, it has been realized that pauperism, idleness, intemperance, and fraud were fostered by indiscriminate giving, and the movement known as organized charity has been started. Its object is to provide

that those members of society who have been called "the waste products of civilization," who are not cared for by their family or kinfolk, fall under the protection of the state in institutions, or of societies so organized as to afford relief at the least possible cost of time, money, and effort, and without demoralizing influence on the beneficiary.[1] The old idea was almost relentless in its grip on the imagination and the conscience of women, but gradually they have been compelled to readjust their views of personal charity to the larger and truer principles of kindness and responsibility. As a result, the old almsgiving function of women has nearly disappeared, but in the newer field which has replaced it, women have rapidly come to their own and are largely participating in such organizations as boards of charities, social settlements, associated charities, and relief bureaus. Recent years have seen great progress along these lines of humanitarian effort. In many cases women have taken the initiative. The number of states and cities is not few which require that the membership of boards of control of insane hospitals, reform schools, prisons, and other

[1] In 1904, 700,000 persons, or one-fifth of the population in New York, were recipients of relief from one agency or another (Howe, *op. cit.*, p. 40).

public charities shall be made up in part of women. Women physicians are more and more placed in positions of responsibility in institutions which care for girls and women. Organizations carried on under private auspices owe an increasing amount of their efficiency and success to the devoted and trained service of women.

Local relief and aid societies, seeking and removing the causes of suffering and distress, are taking the place of the older forms of organization, such as sewing societies, whose effects on the active participants were frequently as harmful as they were upon their dependents.

With this progress has come another conception which already shows signs of proving infinitely more important and which reveals to women an unlimited range of effort and a responsibility which they are assuming with efficiency and eagerness. This new view of charity recognizes that there are social as well as individual causes of misery, dependence, poverty, and crime, that the social order should be so readjusted that these causes will no longer be operative, and that prevention is at least as important as cure. Every intelligent and thoughtful person now believes that the family and household, although the unit of

society, cannot exist for and by itself independently of the other members of the larger group forming the community. Each family must act in relation to the good of all, both for its own well-being and for the welfare of the group. Consequently society is formulating certain lines of action directed toward preventing what Dr. Devine calls the "new elements" in our view of charity, viz., "poor housing, preventable diseases, inefficiency resulting from defective education, corrupt and inefficient government, child labor, excessive and unreasonable toil by women, industrial accidents, a low standard of living."[1]

There is little need to point out in detail the conditions of modern life which bring in their trail degradation and disease and crime. The picture has been painted many times and in vivid colors. The human wreckage of the present time is largely due to causes within the control of modern society. Humanity is awakening to its responsibilities and duties.

In this work also women are not only sharing —they are *leading*. Dr. Cabot says that—

the social worker should be chiefly an educator, a nurturer, stimulator, developer, and director of human

[1] "The New View of Charity," *Atlantic Monthly*, December, 1908, p. 739.

souls, particularly in that group of persons whose character or temperament has brought them into some sort of trouble. There is surely here a demand for those qualities which are termed womanly, even though it is no longer thought unmanly for the other sex to exhibit them.[1]

[1] Quoted by E. T. Devine, *op. cit.*, p. 743.

CHAPTER VI

THE DOMESTIC CHANGE

The changes in industrial, educational, and organized life have greatly modified domestic life—so greatly, indeed, as in the judgment of many observers to imperil it seriously. The removal of the father and often the mother to the office, shop, or factory during the day results in a loss to the children of association with one or both parents. Ease and cheapness in moving from one place to another are destroying the conception of home as a permanent abiding-place. The crowding of people into narrow quarters, flats, and tenements is resulting in loss of freedom, privacy, and sense of ownership, all of which have been thought essential to the best family life. As has been pointed out,

> the family has two functions; as a smaller group it affords an opportunity for eliciting the qualities of affection and character which cannot be displayed at all in the larger group, and it is a training for future members of the larger group in those qualities of disposition and character which are essential to citizenship.[1]

[1] Dewey and Tufts, *Ethics*, p. 584.

Mrs. Gilman has rightly stated that the father and mother must work together for the interests of the family.[1]

When the home was the skilled workshop, when father, mother, and children jointly contributed to the making of the house in its material aspect, there was constant opportunity for the parents to train the child in many of his activities. They now have to send the child to the school for a large part of his training, physical, mental, social, religious. With the disappearance of household industries or their relegation to the hands of the unskilled foreigner, it has become necessary to introduce into the school curriculum matter and methods which will give the child some degree of command over his physical environment, and as yet only a beginning has been made in filling up the gap. In spite of the satisfaction and comfort which come with the modern city house, heated, lighted, drained, furnished with water, food, and clothing at cost of little effort, many a parent longs for the "chore," the household industry, as a means of training his child in usefulness and efficiency. The gymnasium, the

[1] Charlotte Perkins Gilman, "How Home Conditions React upon the Family," *American Journal of Sociology*, March, 1909, p. 605.

dancing-school, the club, the Sunday school, and various outside agencies have come to take the place vacated in the child's life through the changes wrought in the home by the conditions of modern life.

Under the former industrial system the father shared much more largely than at present in the life and training of the child. The part which he now plays is often so small as to give rise to a series of humorous tales with the child's ignorance of his father as the central theme. Under that system, also, community of interest and occupation served to develop in the group a sense of the value of the family as an agency for the protection and care of the young and for the growth of the more personal moral characteristics of the human being.

With fathers absent from the home and with the advent of communal control of sanitary and civic matters have gone many opportunities for training children to assume responsibility in matters leading to the good citizenship demanded in public affairs. Obedience to law, respect for authority, intelligent interest in impersonal activities find little opportunity for expression in the modern home, and what little there is is seldom made use of by the members of the family of the present time.

These changes in the activities of the home affect the woman seriously. She is still thought to be the unifying influence, but the factors she is called on to unify have been greatly lessened. Very many of the elements of education, the preparation of food, the manufacture of clothing and other household goods, the sanitary control, the supplying of reading and of amusements, these and many other interests which formerly called for her most intelligent and her constant endeavor have now, in large measure, passed into other hands.

The time, energy, and intelligence thus set free have been in part appropriated in other fields. The so-called economic independence of a large number of women is far from meaning that they are members of the leisure class. Educational, civic, and philanthropic duties claim part of their time. Within the domain of the domestic life are new conditions to which women are adjusting themselves. Certain limitations have been placed on the authority of the husband in the granting to the wife the right to her own property and to her earnings and to joint control over her children. This fact opens to women, far more than heretofore, a field of responsibility which is directly within the immediate organization called the family, and

which demands training in business principles and methods, care of property investments and money transactions, as well as in the machinery of the law by which the personal and property rights of the different members of the family are safeguarded and the household maintained as a social unit.

CHAPTER VII

THE SOCIAL CHANGE

The popular notion of the meaning of the term social is "friendly," or having personal relations with people. The conventional methods of expressing these relations have greatly changed as the other movements have developed. The following description of old-time hospitality is typical of much that was familiar within the memory of persons now living:

Several times during the season there were family gatherings at the farm in honor of the summer visitors. The guests arrived early in the day. The ladies in gala costume of black glacé silk, with a bit of real lace at the neck, pinned with a round miniature brooch, sat in state in the parlor busy with sewing and knitting, or solemnly waving to and fro a turkey-tail fan, with the firm conviction of being suitably dressed for any occasion, from a wedding to a funeral. The men walked about looking at the stock and admiring the fine points of some "likely" colt, coming into the house just in time for a generous mint julep before dinner.

Dinner was the event of the day and was worthy to be so. First came the rich gumbo soup which cannot be properly made in less than three days; then at one end of the table juicy lamb; at the other a great dish of fried chicken, flanked by hams, spiced and baked in a way

peculiar to Kentucky, every vegetable possible at the season, headed by that dish for the gods, a corn pudding; jellies, amber and crimson; pickles whose fame descended from generation to generation; milk that was like cream and cream that might almost be cut with a knife. There were wonderful cakes and ices and puddings for dessert, and finally came luscious melons that had been buried for days in the ice, and were as good to look upon as to taste.[1]

In New England entertaining friends at meals was not usually done on a very elaborate scale except as measured by the personal labor involved in advance on the part of the hostess. A few friends at supper, never too many to be seated comfortably at the family table, who joined later in the evening in a game of piquet, or, at a later period, euchre, was a favorite and general form of exercising hospitality. The preliminary preparations necessitated work for the housewife in making ready cold meats, cakes, and hot rolls, while the well-stocked storeroom was drawn upon for toothsome jellies, pickles, and preserves, all bearing testimony to the skill, industry, and prudence of the hostess. The hours were early, the friendliness genuine, there was little, if any, trace of an irksome feeling of obligation to repay a social debt.

[1] Patty B. Semple, "An Old Kentucky Home," *Atlantic Monthly*, Vol. LX, p. 40.

It is within the memory of persons not yet old that the afternoon tea was introduced. The advent of that function marked a new period. The era of the visiting-card, the day at home, the caterer, the dinner as a medium for the display of wealth, the crush, the social debt had arrived.

Hospitality gradually lost its personal quality and became a perfunctory recognition of social duty or an easily available method for persons of social ambitions to climb the social ladder.

Friendly calling also was a personal matter in the older time. The visiting-card was unknown. The visitor and her hostess took ample time for the interchange of personal news and friendly gossip, in striking contrast to the present-day custom of making the greatest possible number of calls in an afternoon and feeling a sense of relief when the servant's use of the conventional, but not always truthful, phrase "not at home" enables the caller at trifling cost of time and effort to add one to her list of social duties paid.

The new methods and standards of entertaining have involved so much expense in point of money and brought so little return from the side of personal enjoyment that the exercise of hospitality in the home has become in many

circles almost a lost art. Elaborate functions necessitating the use of large apartments have led to the use of rooms in hotels and clubhouses instead of the home "parlor." Caterers, florists, musicians, and professional entertainers are employed at great cost. Lists of guests are stretched to include the slightest acquaintances, their sisters, their cousins, and their aunts, and especially their brothers and their sons.

As a result of these changes the social instinct of women has found expression in part through a movement for some years characteristic of the United States, but now rapidly extending through all civilized countries. The club movement[1] is the form in which many former activities of women now present themselves. The sewing circle, the husking bee, the afternoon visit, are things of the past. The luncheon table at the club, the reception in honor of a distinguished guest, the gathering of groups for conference and study all bring women together in social relations through a common organization. In spite of attempted witticisms on the part of the scoffer, it is true that the old spirit of friendliness finds general expression

[1] The General Federation of Women's Clubs in 1908–9 had a membership of 967 individual clubs with 77,544 active members and 8,592 associate members. There were 5,312 clubs in the state federations with 358,497 members.

through these channels. More important than the broadened intellectual life which has come to women through their interest in clubs is the larger and deeper social spirit which is fostered through the club movement and which was quite unknown to women of former generations. The mechanism of club organization has necessitated the development of a power to co-operate which women in their former individualistic life wholly lacked. It was formerly thought, and the charge is still sometimes made in the funny columns of the popular press, that women could not be organized in social groups except at the cost of incessant wrangling and petty jealousies. The splendid achievements of women through their organizations have proved that only opportunity and training were needed to develop a great and useful force. The enumeration of some of the great women's national organizations is sufficient to prove that this power of social organization is tremendously effective. The General Federation of Women's Clubs, the Association of Collegiate Alumnae, the Congress of Mothers, the National Council of Jewish Women, the National Woman's Trade Union League, and the great denominational missionary associations represent in part this new form of social activity.

Their power of co-operation and their eagerness to avail themselves of opportunities to make use of it may be judged from the participation of women with men in such organizations as the National Education Association, the Conference of Charities, the National Child Labor Committee, the Religious Education Association, the American Federation of Labor, the American Association for the Advancement of Science, the American Medical Association, the American Library Association, the American Home Economics Association, the Actors' Alliance, as well as in organizations devoted to more special phases of science or art, such as the American Chemical Society, the American Public Health Association, the American Philosophical Society, the American Historical Association, and scores of others.

This larger social spirit also manifests itself in the movement looking toward co-operation in government control through suffrage, a movement which has assumed proportions indicated by the facts that there are four states which grant to women the same political rights as to men, viz., Colorado, Idaho, Utah, and Wyoming, and that the right to vote on some or all school questions is granted to women in Arizona, Colorado, Connecticut, Delaware, Iowa, Illinois,

Idaho, Kentucky, Kansas, Michigan, Massachusetts, Minnesota, Mississippi, Montana, Nebraska, New Hampshire, New Jersey, New York, North Dakota, Oklahoma, Ohio, Oregon, South Dakota, Utah, Vermont, Wyoming, and Wisconsin.

Kansas, in addition to the states which grant full suffrage, grants municipal and bond suffrage to women, New York gives tax-paying women in all towns and villages the right to vote on questions of local taxation, and Montana and Louisiana give tax-paying women the right to vote upon all questions submitted to the tax-payer. In Minnesota, women have the right to vote for library trustees.

CHAPTER VIII

SUMMARY AND OUTLOOK

This survey of the present activities and interests of women indicates the range of duties which women must be fitted to perform. In spite of prejudice and conservatism many paths have been opened and followed by increasingly large numbers of women. So successful have women been in many of the new fields they have reached, such as some grades of teaching, librarianship, and clerical work, and so valuable have been the services they have rendered, that not only has public protest practically ceased, but the right is freely accorded to them to use their powers to the full. In certain other fields, especially where rank, remuneration, and administrative or even academic authority bring women into seemingly direct competition with men, obstacles still exist and barriers are raised.[1]

The following is an illustration of the attitude of many so-called scholars toward the work of women. It is typical of many experiences that women might relate:

[1] The election of Mrs. Ella Flagg Young by the Chicago Board of Education to the superintendency of the Chicago schools is a notable exception to this statement.

A woman student who had had successful experience in teaching wished to consult some experts in regard to the pedagogical treatment of certain scientific subjects, especially as her theory ran counter to much of the accepted doctrine. Her letters, signed with her full name, received courteous but otherwise empty replies. It occurred to her to sign her next letter merely with her initials. The following reply came:

> Dear Mr. ———: I am tremendously interested in the question and consider it the most vital and important with reference to ——— education now before the teachers of the country. You will have a hard fight for your position, but you can't hit too straight from the shoulder to suit me. So many women teachers who ought to be tatting or doing other fancy work, are wedded to their pretty little courses in ———, and they will fight for them like cats. I hope you will get your paper printed. Could I not help you?
>
> Very sincerely,
>
> ——— ———

In other fields again women occupy a place and perform tasks which arouse a genuine and widespread feeling of regret if not alarm. Such are various industrial and commercial pursuits. An analysis of the situation, however, proves to the candid observer that most if not all of the conditions which seem hazardous to women are conditions which should not be tolerated

for any human beings. Such are prolonged hours of toil, insufficient wages, unsanitary surroundings and unprotected machinery.

A brief outline of existing groups of women may be given, based upon the activities which occupy them, viz.:

I. *The self-supporting woman*
   a) The industrial woman,
      e. g., factory operative.
   b) The domestic worker,
      e. g., cook, chambermaid, waitress, laundress.
   c) The commercial worker,
      e. g., stenographer, clerk, saleswoman.
   d) The professional woman,
      e. g., physician, trained nurse, teacher, librarian, civil servant, artist, musician, scholar, author.

II. *The housewife*

III. *The leisure-class woman*
   e. g., the philanthropic, religious, civic, educational, and aesthetic worker, the volunteer public servant.

IV. *The drone or social parasite*
   e. g., the woman of fashion.

Of these groups the self-supporting women and the women engaged in household and family duties are the ones highest in importance as well as in numbers. It is even to be hoped or expected that the other groups will disappear in response to the ethical and economic standards and demands of an advancing civilization.

The most striking fact in connection with those in the first group, the industrial workers, is the early age at which they are forced into labor, often unskilled and with no training or opportunity for development and advancement. The following statement illustrates this point.

> Of the 195 children fourteen and fifteen years old who secured employment certificates from the superintendent of schools in Cincinnati during the first twenty-two days of June, 1909, 55 went to work in shoe factories; 40 in retail stores; 15 in clothing factories; 12 in box factories; 8 in machine shops; 6 in the messenger service, and the others scattered themselves in laundries, bakeries, and factories of various kinds. Of these children, 107 were boys and 88 girls; 137 were fourteen and 58 fifteen years of age. They withdrew from school before the end of the scholastic year, and the great majority will never return to their studies. The point of special interest is that such an extremely small number of boys enter the machine shops and thereby become eligible for enrolment in the new continuation school, as compared with the number who enter stores, factories, and other establishments, in which, as a rule, they are evolved into unskilled workers or dull-witted machines.[1]

The employment of educated women and their entrance into professions and extra-industrial occupations afford more or less free opportunity for the development and exercise of individual powers. The state care of the educa-

[1] *Survey*, Vol. XXII, p. 531.

tion of children has been largely intrusted to this new class of educated women. Just as formerly the statesman and the public moralist insisted on the gainful employment of women and urged them to heed the call of the factories for operatives,[1] so also they encouraged them as their education advanced to undertake the school care of children. The cry is now being raised that the schools are suffering from over-feminization. Replacing women with men teachers would be but a sorry remedy for any difficulty which may exist. More of the father in the home, sharing in the life and training of the child, is the change more imperatively needed. The service of well-trained women in education is too important to justify some of the slurs which have been recently cast upon it.

The entrance of women into special fields of knowledge, the professions, the sciences, the languages, history, and economics, has not only greatly enriched their intellectual life, but to a large extent satisfied the natural craving of nearly all human beings, men and women alike, to exercise their mental faculties. There is not yet, however, free scope or complete recognition for women in this direction. It is interesting to note in the academic world, for

[1] Edith Abbott, *Women in Industry*, chap. iv.

example, how frequently men scholars depend on their wives for technical co-operation in their researches and studies, and at the same time it is more or less a matter for amused comment by those who know the circumstances, when the results of the investigations are made public without acknowledgment of this source of professional assistance. In this, as in many other instances, joy and satisfaction come properly from the act of service itself—not from credit received; but there seems to be no reason why the two should not be combined.

The plea frequently made for the enriched intellectual life, large social usefulness, and economic independence for woman has as its aim not only greater happiness and satisfaction for the individual herself, but to enable her to bring "to bear upon her proper problems, maternity and child culture, a larger wisdom than she now possesses."[1] These suggestions point to the imperative social demand that women be specifically fitted for the duties of wife and mother. In a condition of economic independence and intellectual and social freedom, maternity will claim its just place in the interests of a liberated woman only if as a child

[1] Charlotte Perkins Gilman, *American Journal of Sociology*, Vol. XIV, p. 605.

she is made to understand what the end of this function is and its dignity has been impressed upon her mind. Wifehood and motherhood are now frequently placed on too low an economic, social, or moral plane, with disastrous results to the individual and to the family. It is time that those who believe that the sphere of woman should be limited to the walls of her dwelling should recognize that the fact that she is a woman is not in itself an adequate qualification for her task. Throughout all her training there should run the idea of her high function as a wife, as a mother, as a home-maker in the true sense. When the shackles of an outworn tradition have been thrown off, this function will be found not to interfere with the development of that individuality which should be treasured, but to contribute to its upbuilding and to give opportunity for its free expression in a measure but little realized by those who are clinging to the traditions of a dead past as the chief means of differentiating women from men.

The central thought in these suggestions is that the home is still "woman's sphere" and will always be for most women. In saying this, however, it must not be forgotten that the home is no longer what it formerly was, that it is destined to undergo still more profound

changes, and that efforts to retain it on its old basis will be for the most part futile.

It has been said that—

> So long as woman was regarded mainly as a vehicle for sex gratification and a cheap housekeeper combined, so long as it is thought that "the noblest thing any woman can do is to be a good wife and mother," so long as women are not gladly and consciously recognized by men to be a part of the human race as well as bearers of it, that long will the ideal of the family leave much to be desired and the actual family remain a heavy sociological problem.[1]

Happiness, satisfaction, and progress all demand a new view of the home as a permanent human institution if the highest welfare of the individual, the family, and the nation is to be secured with its help. Neither men nor women should be content to cling to outgrown industrial, educational, and social customs as a basis for the home. They should rather seek to find expression, under changed and ever-changing conditions, for those functions of the home which will outlast any industrial, educational, or social system. Better marriage, higher standards of fatherhood and motherhood, wider scope for the development of individuality, more intelligent appreciation of the rôle of the family in

[1] A. B. Wolfe, *Proceedings of American Sociological Society*, Vol. III, p. 60.

the state, greater privacy, truer protection, more generous affection which will bind the family more strongly as a unit, these are the ideals toward which women must work in new and even untried ways in their great ever-old and ever-new sphere.

PART II

CHANGES IN THE EDUCATIONAL MACHINERY

CHAPTER IX

SCHOOL ATTENDANCE

The preceding summary has shown that the American girl has open before her a wide range of activities of which many are carried on outside the home. Through these activities she attempts to satisfy imperative needs. She has a physical frame to be kept healthy and made efficient; intellectual, moral, and spiritual powers to be trained and satisfied; social, civic, and domestic capacities to exercise; and often she must earn her living. Accordingly she enters one of the learned professions, for which specific and even prolonged training outside the home has always been required; she becomes the head of a household and assumes the responsibilities connected with the nurture of children, for which at an earlier time the home furnished adequate training, but for which at present general intelligence and the feminine instinct are in general considered an adequate outfit; she engages in office or clerical work for which a slight technical training is required, or she becomes an employee in factory or shop, for which the possession of a mechanism such as the

human body, though undeveloped and untrained, is accepted, at the present time, as sufficient.

The American school system through which the girl receives more and more of her training has, from the beginning, felt the influence of those interests which are chiefly intellectual. The learned professions were the only occupations in earlier times which required a knowledge derived from books. They placed the stamp of their own needs on all so-called "education" beyond the elementary principles, "the three R's." Their control has been relentless, until now, under the influence of forces which cannot longer be withheld, modifications are gradually creeping in and the school curriculum is slowly responding to the needs created by the industrial, civic, domestic, and social changes which have been going on.

The extent to which this adaptation is at present accomplished in the elementary schools may fairly be judged by a scrutiny of figures taken from the *Report of the United States Commissioner of Education for 1907–8*. It appears that the school does not hold the children. Of the eighteen millions of children in this country less than half complete a grammar-school education.

The following tables show that the number

of boys in the eighth grade is less than one-third the number in the first, while the proportion of the girls in the higher grades is only slightly greater.

TABLE I

SHOWING GRADE DISTRIBUTIONS IN 508 CITIES AND VILLAGES OF 4,000 TO 8,000 POPULATION, 1907–8

Grade	Boys	Girls	Total
First	47,104	45,133	92,237
Second	35,354	33,595	68,949
Third	33,063	32,499	65,562
Fourth	30,835	30,824	61,659
Fifth	27,272	27,605	54,877
Sixth	22,687	24,255	46,912
Seventh	18,827	20,787	39,614
Eighth	14,372	16,446	30,818

It will be noted that the number of boys in the eighth grade is 30 per cent. of the number of boys in the first grade, while 36 is the corresponding figure for girls.

TABLE II

SHOWING GRADE DISTRIBUTION IN 532 CITIES OF 8,000 POPULATION AND OVER, 1907–8

Grade	Boys	Girls	Total
First	324,885	306,503	631,388
Second	255,372	243,364	498,736
Third	241,171	234,372	475,543
Fourth	226,221	221,886	448,107
Fifth	200,189	200,274	400,463
Sixth	164,997	170,996	335,993
Seventh	128,574	139,352	267,926
Eighth	91,501	102,651	194,152

Here the number of boys in the eighth grade is 28 per cent. of the number in the first; while 33 is the corresponding number for girls.

Although there are doubtless other factors contributing to this result, it is clear that the advantages of school attendance are not compelling to either boys or girls, even in the lower grades.

To the extent of the difference between 30 and 36 or 28 and 33 the elementary school seems to meet the needs of girls better than those of boys, and it probably does fit girls for clerical and commercial positions better than it prepares boys for trades or industrial pursuits. Nevertheless, a glance will show that even with this exception the curriculum has few features which indicate striking adaptability to the chief needs of girls as they have been described.[1]

If the figures for the high school are examined they are found to indicate a still lower degree of adjustment to needs, for here, while again

[1] See, however, the following statement from a recent careful and intelligent investigation made under the auspices of the Russell Sage Foundation:

"There is 13 per cent. more retardation (i. e., falling behind their class) among boys than among girls, and the percentage of girls who complete the common-school course is 17 per cent. greater than the percentage of boys. These facts mean that our schools as at present constituted are far better fitted to the needs of girls than they are to those of the boys."—L. P. Ayres, *Laggards in Our Schools*, p. 6.

the needs of the girls seem to be slightly better recognized than those of the boys, the proportion of those in the high school to those in the lower grades is so small as to suggest great maladjustment, and the situation indicated is so much more unfavorable than that in the elementary school that an explanation is demanded by the most superficial scrutiny. The question suggests itself as to whether those responsible for the organization of this portion of the system are peculiarly unresponsive to the needs of the young people at the adolescent period, or whether there may not be some special handicap weighting the machinery at this point, so that it fails to respond to the same stimuli operative upon the lower grades. Here the proportions instead of ranging near 1 to 3 are reduced to 1 to 8 or even 1 to 10 or 1 to 14.

The statistics of enrolment and number of graduates in high schools in 1907–8, given on the following page, are taken from the *Report of the United States Commissioner of Education for 1907–8*. The preponderance of girls over boys and the small proportion of those who complete the course, greater among the girls than among the boys, are the striking facts here as in the case of the elementary schools.

A fairer basis of judgment, however, of the

STATISTICS OF ENROLMENT AND GRADUATION

	Enrolment	Graduates	Percentage
8,960 HIGH SCHOOLS IN UNITED STATES			
Boys	327,803	34,488	10.5
Girls	442,653	55,744	12.5
605 HIGH SCHOOLS IN NEW YORK			
Boys	38,468	2,797	7.25
Girls	49,199	4,556	9.3
230 HIGH SCHOOLS IN MASSACHUSETTS			
Boys	21,660	2,891	13.4
Girls	27,387	4,188	15.3
160 HIGH SCHOOLS IN VIRGINIA			
Boys	3,100	186	6
Girls	4,690	363	7.2
98 HIGH SCHOOLS IN KENTUCKY			
Boys	3,137	282	9
Girls	4,410	507	11.5
564 HIGH SCHOOLS IN ILLINOIS			
Boys	24,137	2,302	9.5
Girls	31,346	3,666	11.7
344 HIGH SCHOOLS IN MISSOURI			
Boys	11,954	1,231	10.3
Girls	17,102	2,202	12.8
93 HIGH SCHOOLS IN COLORADO			
Boys	4,870	477	9.8
Girls	6,748	792	11.8
162 HIGH SCHOOLS IN CALIFORNIA			
Boys	11,762	1,087	9.3
Girls	15,826	1,818	11.5

present system than is supplied by these figures can be obtained by such an examination of the system itself as offers opportunity for noting the changes which have been made in the recent past and are in process of adoption at the present time.

The succeeding chapters will, therefore, present a description of the conditions of forty years ago and of the present time in the public schools, elementary and secondary, of Boston and Chicago.

In order to help determine the cause for the seeming maladjustment of the high school to the needs of the students, the demands of the next higher grade of educational institution—the college—both as to entrance requirements and curriculum will be presented. Accordingly the conditions prevailing in a typical woman's college and in a state university will be described as they existed forty years ago and as they exist at the present time.

CHAPTER X

THE PUBLIC SCHOOLS OF BOSTON, 1859 AND 1909

A scrutiny of the course of study offered to the children of Boston during the years 1857–61 is of interest. The city documents outline that course as follows:

Course of Study for the Primary Schools of Boston, 1857–61[1]

SIXTH CLASS

Tower's *Gradual Primer.*

My First School Book, as a spelling-book.

Pronunciation of words without spelling.

Pronunciation and spelling combined.

Spelling without book words that have become familiar.

Counting from 1–100.

Drawing on slate or blackboard imitating some mark, letter, or other object, or copying from a card.

FIFTH CLASS

Tower's *Gradual Primer.*

My First School Book, continued as a spelling-book, in the columns to the 20th page, and as a reading-book in the sentences to the 70th page.

Numeration or counting from 1–100.

Drawing continued, as in the sixth class.

[1] "School Committee Documents," *City Documents*, No. 17, chap. xii.

FOURTH CLASS

Tower's *Gradual Primer.*

My First School Book, continued as a spelling-book, completed as a reading-book.

Combination of numbers, so as readily to find the page in any book.

Marks of punctuation.

THIRD CLASS

Bumstead's *Second Reading-Book.*

My First School Book completed as a spelling-book.

The letters used for numbers to be taught as they occur in the captions of the reading-lessons.

All the numerals and abbreviations on p. 56 of *My First School Book* to be learned.

SECOND CLASS

Bumstead's *Second Reading-Book.*

Spelling and Thinking Combined, commenced.

The addition, subtraction, and multiplication tables to be learned, and practical questions in these rules attended to.

FIRST CLASS

Bumstead's *Third Reading-Book.*

Spelling and Thinking Combined, completed.

North American Arithmetic, completed.

New Testament.

The scholars in this class must be familiar with practical questions in all of the first four rules of arithmetic.

From this apparently rather bare scheme the following interesting facts emerge:

During the six years for which the "primary grades" provided, the time was literally and

exclusively devoted to spelling, reading, writing, and arithmetic, i. e., to the mechanics of reading and numbers, with the one exception constituted by the requirement regarding the New Testament in the first class.

The achievements of the primary grades are reflected, of course, in the requirements of the "Grammar" grades which are indicated in the following section from the "School Committee Document":

Course of Study for the Grammar Schools of Boston, 1857–61[1]

Sec. 4. Requirements for admission: Any pupil may be admitted into the Grammar Schools who, on examination by the master, shall be found able to read at first sight easy prose; to spell common words of one, two, or three syllables; to distinguish and name the marks of punctuation; to perform mentally such simple questions in addition, subtraction, and division as are found in Part I of Emerson's *North American Arithmetic;* to answer readily to any proposed combination of the multiplication table in which neither factor exceeds 10; to read and write Arabic numbers containing three figures, and the Roman numerals as far as the sign of 100; and to enunciate clearly and accurately the elementary sounds of our language. And no pupil who does not possess these qualifications shall be admitted into any Grammar School except by special permit of the District Committee.

[1] "School Committee Documents," *op. cit.*

To those who could comply with these requirements the following course of study was open, in which in addition to courses giving the technique of reading, writing, and numbering are offered what might be called content courses in geography and history.

SEC. 7. No lesson shall be assigned to boys to be studied out of school hours longer than can be acquired in an hour's study by boys of good capacity. No out-of-school lessons shall be assigned to girls.

FOURTH CLASS

(1) Worcester's *Spelling-Book;* (2) Hillard's *Fourth-Class Reader;* (3) Writing in each school in such writing-book as the District Committee may approve; (4) Drawing; (5) Warren Colburn's *First Lessons*, new edition, with lessons in written arithmetic on the slate and blackboard; (6) Warren's *Primary Geography.*

THIRD CLASS

(1) Worcester's *Spelling-Book;* (2) Hillard's *Third-Class Reader;* (3) Writing, as in fourth class; (4) Warren Colburn's *First Lessons*, new edition, with lessons in written arithmetic on the slate and blackboard; (5) Drawing; (6) Warren's *Common-School Geography;* (7) Tower's *Elements of English Grammar.*

SECOND CLASS

(1) Spelling; (2) Hillard's *Second-Class Reader;* (3) Writing, as in fourth class; (4) Warren Colburn's *First Lessons*, new edition, and Eaton's *Arithmetic;* (5) Warren's *Common School Geography*, with exercises in

map-drawing, on the blackboard and by pen and pencil; (6) Tower's *Elements of English Grammar*, or Bullion's *Analytical and Practical Grammar;* (7) Exercises in drawing and composition, and in the boys' schools, declamation; (8) Swan's *First Lessons in the History of the United States.*

FIRST CLASS

(1) Spelling; (2) Reading in Hillard's *First-Class Reader* or in the *Progressive Speaker and Common-School Reader*, at the election of the subcommittee of each school; (3) Writing, as in fourth class; (4) Geography, as in second class; (5) Warren Colburn's *First Lessons*, new edition, and Eaton's *Arithmetic;* (6) Bullion's *Analytical and Practical Grammar;* (7) Exercises in composition and, in the boys' schools, in declamation; (8) Drawing; (9) Worcester's *Dictionary;* (10) Bookkeeping by single and double entry; (11) Worcester's *History;* (12) Hall's *Manual of Morals*, a Monday morning lesson with oral instruction; (13) Instruction in natural philosophy, using Parker's *Compendium* or Olmstead's *Rudiments* as a textbook, with the philosophical apparatus provided for the schools, shall be given at least to the first division of the first class; (14) Instruction in physical geography by occasional exercises, the treatise of Warren or of Cartée being used as a textbook; (15) Stearns's *Practical Guide to English Pronunciation;* (16) Hooker's *Primary Physiology.*

It is not without interest that the capacity of the boys to add an hour of home work was recognized or that the greater preoccupation of the girls with home duties was understood

as preventing their extending their school duties beyond school hours; nor is it without interest that for the boy provision begins to be made in training for what is now known as public appearance.

The high-school course is subject to considerable elaboration; further language, an introduction to philosophical modes of thinking, music, finally science and method of teaching open up the world of art and recognize and provide for the professional idea.

Course of Study for the Girls' High and Normal School of Boston, 1857–61[1]

Secs. 4 and 5. Admission requirements: Candidates for admission must be over fifteen and not more than nineteen years of age. They must present certificates of recommendation from the teachers whose schools they last attended, and must pass a satisfactory examination in the following branches: viz., spelling, reading, writing, arithmetic, English grammar, geography, and history. The examinations shall be conducted by the instructors of the schools, both orally and written, from written questions previously prepared by them and approved by the Committee of the school.

JUNIOR CLASS

Reading, spelling, and writing continued; arithmetic, grammar, and geography reviewed; physical geography; natural philosophy; analysis of language and structure

[1] "School Committee Documents," *op. cit.*

of sentences; synonyms; rhetoric; exercises in English composition; history; Latin, begun; exercises in drawing and in vocal music.

MIDDLE CLASS

Natural philosophy, continued; English literature; algebra; moral philosophy; Latin, continued; French, begun (instruction given by a native French teacher); rhetoric, with exercises in composition, continued; physiology, with lectures; general history; exercises in drawing and in vocal music; reading standard English works, with exercises in criticism.

SENIOR CLASS

Latin and French, continued; geometry; general history; intellectual philosophy; astronomy; chemistry, with lectures; exercises in composition; exercises in drawing and in vocal music; exercises in critical composition; a careful examination of works of the best English authors; instruction in the theory and practice of teaching. Such instruction in music shall be given to all pupils as may qualify them to teach vocal music in our public schools.

Turning now to the present time, the following scheme offered for the current year is presented. Here it is noticeable that "literature" as well as reading, that is content as well as technique, is introduced in the first grade; that training for the hand through manual or domestic arts begins as early as the second year; while the science and art of caring for the body

COURSE OF STUDY FOR THE ELEMENTARY SCHOOLS OF BOSTON, 1909–10

SUBJECTS AND EXERCISES, AND THE NUMBER OF MINUTES A WEEK ASSIGNED TO EACH

	I	II	III	IV	V	VI	VII	VIII	
Arithmetic	25	210	210	270	270	230	210	210	1,635
Drawing	100	95	90	90	90	90	90	90	735
Elementary science	30	30	30	45	45	45	45	60	330
Geography	..	..	..	150	150	150	150	90	690
History	.	..	..	30	30	120	120	150	450
Manual training or household science and arts	..	30	30	120	120	120	120	120	600
Music	60	60	60	60	60	60	60	60	480
Opening exercises	60	60	60	30	30	30	30	30	330
Physical training	60	90	90	80	80	80	80	80	640
Physiology and hygiene	..	..	30	30	30	30	60	60	240
Recesses	200	200	200	100	100	100	100	100	1,100
Reading and literature	735	480	455	190	190	165	150	195	2,560
Spoken and written English	230	245	245	305	305	280	285	255	2,150
Totals	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	12,000

are brought to the attention of the child in the third year. In the light of the latter fact, the following outline of the course offered in these subjects during the last year of the grade-school experience is significant.

PHYSIOLOGY AND HYGIENE

GRADE VIII. SIXTY MINUTES A WEEK

I. *Review of general physiology, personal and home hygiene*

Connect with English.

Connect with Civil Government.

Show the necessity for government action.

Relation of the individual to the home, to the school, and to the community.

Dependence of the general welfare of society upon the individual.

Duty of the government to promote the general welfare.

Show that certain laws pertaining to the public health should be national in scope, that certain laws should be controlled by the state, that certain laws should be controlled by the city.

II. *School and public hygiene*

Show by statistics or transmission of disease the relation of

Personal hygiene to public health.

Home hygiene to public health.

School hygiene to public health.

Public hygiene to public health.

III. *Boards of Health* (Review points taught in Civil Government)

- Necessity.
- State; appointment.
- City or town; appointment.

IV. *Study of some public-health problems*

- Food supply.
  - Reasons for protection.
    - Adulteration.
      - Meaning.
      - Result.
      - Protection from inspection by United States government.
  - Careless handling.
    - Inspection of milk, meat, fish, bakeries.
- Water supply.
  - Boston's supply.
  - Wells and springs.
  - Ice.
- Impure air.
  - Protection from:
    - Ventilation.
      - Board of Health regulations for school houses, tenements, lodging-houses, factories, workshops, and stores.
  - Sanitation:
    - Board of Health laws.
    - House cleaning.
  - Plumbing:
    - Requirements.
    - Inspection (Board of Health laws).

Sewage:
Study of disposal (Board of Health laws).
Garbage and Waste.
Dangerous and offensive employments.
Characteristics.
Study of some typical industries in Massachusetts.
Contagion.

V. *Special school hygiene*
Physical training.
Lists of some good gymnastic exercises, sports, games, and plays.
Concentration:
Meaning of.
Necessity for (apply to modern methods of living).
Work accomplished.
Quality; quantity.
Conditions for.
Environment.
Air, light, temperature, attractions likely to interfere.
Personal.
Health, feeling toward the work, self-control, best time for the work.
Drugs:
Meaning.
Use.
Types:
Narcotics.

Alcohol:
- Properties.
- Value in arts and industries.
- Manufacture.
- Use as a beverage.
  - Emphasize:
    - Its effect upon power of body to resist disease.
    - Its relation to success in the industrial world.
    - Its relation to the state and nation, as regards poverty, crime, and expense.

Tuberculosis.

The conscious use of the opening exercises for purposes of moral training renders significant the following notes from the *Public School Regulations:*[1]

MORAL TRAINING

OPENING EXERCISES

(Sixty minutes a week for the first three grades, thirty minutes a week for the remaining grades)

Note 1.—Teachers are directed to give instruction for a few minutes in good manners and good morals at the opening of school in the morning and at other favorable opportunities. In giving this instruction, teachers should keep strictly within the bounds of manners and morals, and thus avoid all occasions for treating of or alluding to sectarian subjects.

[1] *Regulations of the Public Schools of the City of Boston,* sec. 225.

Note 2.—"All preceptors and teachers of academies, and all other instructors of youth shall exert their best endeavors to impress on the minds of children and youth committed to their care and instruction the principles of piety and justice, and a sacred regard for truth, love of their country, humanity, and universal benevolence, sobriety, industry and frugality, chastity, moderation and temperance, and those other virtues which are the ornament of human society, and the basis upon which a republican constitution is founded; and they shall endeavor to lead their pupils, as their ages and capacities will admit, into a clear understanding of the tendency of the above-mentioned virtues to preserve and perfect a republican constitution and secure the blessings of liberty as well as to promote their future happiness, and also to point out to them the evil tendency of the opposite vices."—*Revised Laws of the State of Massachusetts*, chap. 42, sec. 18.

Note 3.—In all intercourse with the pupils they (the teachers) shall strive to impress on their minds, both by precept and example, the principles of morality, truth, justice, and patriotism, and to train them up to a true comprehension of the rights, duties, and dignities of American citizenship, and the avoidance of falsehood, idleness, and profanity.

For the student who has completed the work of the grades, Boston offers one of three courses: that offered by the Girls' Latin School, or by the High School of Practical Arts, or by the Girls' High School.

For the girl who has chosen to go to college,

the Latin School offers the following programme of studies:

BOSTON GIRLS' LATIN SCHOOL

COURSE OF STUDY, 1909. SUBJECTS AND PERIODS PER WEEK

Subjects	Sixth	Fifth	Fourth	Third	Second	First
English and history	6	6	5	4	4	2
Latin	5	5	5	4	4	4
Geography	2	2½	..	..	..	..
Physiology and hygiene	½	..	..	..	..	..
Mathematics	4½	4	4	3	3	4
Gymnastics and singing	2	2	2	2	2	2
Botany	..	½	..	..	..	..
French or German	..	..	3½	2	2	..
Botany and physiology	..	..	½	..	..	..
Greek*	..	..	..	5	5	4½
Physics	..	..	.	..	..	3½

* German may be taken instead of Greek.

The rigidity of this course is noteworthy. Light may be thrown upon this fact by a scrutiny of the requirements of admission to colleges which have but slightly modified their requirements in the past quarter of a century.

For the girl who looks forward to remaining at home and wishes that home life to be illumined by scientific insight and made efficient by the acquisition of the domestic arts, or for the girl who expects to become a wage-earner in the exercise of one of the sewing trades, the High School of Practical Arts provides the following training:

BOSTON HIGH SCHOOL OF PRACTICAL ARTS

COURSE OF STUDY, 1909. SUBJECTS AND PERIODS PER WEEK

Subjects	First Year	Second Year	Third Year	Fourth Year
English	5	4	4	4
History and civil government	2	2	2	..
Mathematics	4	..	..	..
Art	4	5	5	5
Sewing	6	..	..	..
Cooking and housewifery	4	..	..	..
Choral practice	1	1	1	1
Physical training	2	1	1	1
Foreign languages	..	3	3	3
Chemistry	..	4	..	..
Biology (one-half year)	..	..	2	..
Physics (one-half year)	..	..	2	..
Household accounts (one-half year)	..	..	..	2
Home nursing (one-half year)	..	..	..	2
Economics	..	..	..	2

In the second, third, and fourth years the pupil chooses between the dressmaking, millinery, or housekeeping course for ten periods per week.

The purpose of this school is to give full opportunity for the development of that type of students whose talents lie more in lines of doing and expressing than in lines of acquisition.

The course of study is presented under two general heads—academic and industrial.

The Industrial Department at present offers a course in household science to girls who desire

to make an intelligent study of the home from the standpoints of sanitation, furnishing, decoration, and care, and dressmaking and millinery courses which aim to give ideals, taste, and skill which shall have money-earning value for the possessor.

The educational value of this course is described as follows:

The high-school girl is at the age when she is working up to some of the larger problems of life. She is beginning to question her own place and her own relation to society.

It is the critical period at which to present to her the problems of the home and through these to give her a broader and more intelligent outlook that will enable her better to adjust herself to life.

It is the purpose of the course to make her familiar with some of the home problems and to help her to develop a sense of civic responsibility, to help her to establish good standards, and to give her a sense of comparative values.

PRACTICAL VALUE

Power to make application of theoretical principles.

Perseverance in carrying out design.

Judgment as to time required for different processes.

Intelligence in buying with the ability to select a good article.

Ability to organize and control material.

Ability to carry through a process which involves the co-ordination of details.

Training in accuracy and exactness with the ability to distinguish between the essentials and non-essentials.

The power to carry out household processes so that she might do her own work, if necessary.

Accompanying this is a descriptive statement of the work done in the courses and the reference books used.

For the girl who has chosen neither of these lines of interest, who may either not have chosen at all, or who may have chosen some one of the lines of employment of a clerical or office type, the high school offers a wide range of choices, as shown by the table on opposite page.

A diploma is awarded to pupils who have won seventy-six points, which usually requires four years' attendance. The amount of work represented by one period a week for one year in any study counts as one point toward winning a diploma. The points offered for a diploma must include

1) Six points in physical training.

2) One point in hygiene.

3) Three points in choral practice.

4) At least thirteen points in English.

5) At least seven points in the same foreign language or in phonography and typewriting.

6) At least four points in mathematics or in bookkeeping.

7) At least three points in history.

8) At least three points in science.

9) Not more than fifteen points for drawing, household science and arts, manual training, and music combined are allowed to count toward a diploma.

BOSTON HIGH SCHOOLS

COURSE OF STUDY, 1909. SUBJECTS AND PERIODS PER WEEK

Subjects	First Year Prescribed	Second Year Prescribed	Third Year Prescribed	Fourth Year
Physical training	2	2	2	...
Hygiene	1	...	...	...
Choral practice	1	1	1	...
English	5	4–5	3,4,5	...
Algebra or	4–5	...	...	...
Bookkeeping or	4–5	...	...	...
Latin, French, or German	4–5	...	...	...
	Elective	Elective	Elective	
History	3–5	3–5	3–5	3–5
Biology	3–5	3–5	...	...
Manual training	3–5	3–5	...	...
Drawing	3–5	3–5	3–5	3–5
Music	2	2	2	...
Mathematics	...	3–5	3–5	3–5
Greek	...	3–5	3–5	3–5
Latin	...	3–5	3–5	3–5
French	...	3–5	3–5	3–5
German	...	3–5	3–5	3–5
Spanish	...	3–5	3–5	3–5
Physics	...	3–5	3–5	...
Bookkeeping	...	3–5	...	...
Phonography and typewriting	...	3–5	3–5	3–5
Commercial geography	...	3–5	...	...
Physiology	...	...	3–5	...
Chemistry	...	...	3–5	3–5
Household science and arts	...	...	3–5	...
Commercial law	...	...	3–5	...
Civil government	...	...	3–5	...
English	...	...	...	3–5
Physical geography	...	...	...	3–5
Economics	...	...	...	3–5
Physical training	...	...	...	2
Choral practice	...	...	...	1

A part of the time assigned to the opening exercises is used in giving instruction in morals and manners.

It is quite possible for a girl to enter college on graduating from this school provided she chooses her studies accordingly from the time of her admission. By every year that she delays this decision it becomes the more difficult, even impossible, for her to continue her intellectual training under the direction of college authorities. Not only are the subjects determined through which mental discipline is to be acquired, but very precise and specific details of method and content are laid down by college-entrance boards.

CHAPTER XI

THE PUBLIC SCHOOLS OF CHICAGO, 1861 AND 1909

Turning from the Boston to the Chicago schools, the early programme is given in order that it may be compared with that of Boston and also that a wider view may be attained of the educational standards of that time than would be possible by a scrutiny of the programme of one city only.

It is interesting to note that in the Chicago programme devices for securing information as well as the technique of reading, writing, and ciphering were present in the first grade, instruction with regard to "common things" being supplied from the beginning. The course is still, however, one fitting the child to acquire through books exclusively and, except for a slight acquisition of drawing, to express himself verbally. That the course was "too theoretical" was urged as one reason for improvement eight years later, when a new curriculum was introduced which would:

(1) make the instruction less theoretical and more practical; for example, a pupil leaving school at the end

of the lowest grade will at least be able to write his own name; at the end of the primary grades he will have a practical knowledge of the fundamental rules of arithmetic, will be able to read tolerably well and to write a legible hand, and in fact he will have attained something useful in after-life wherever he may be compelled to leave the school; (2) require a little less of the text-book and more of the teacher; (3) call for results and leave methods to the judgment of the individual teacher.[1]

The changes then introduced need not be indicated here in detail. The educational trend may be seen more clearly if this programme be compared with the curriculum in force in 1909.

Course of Study Adopted March 6, 1861

TENTH GRADE

Oral instruction, embracing lessons on common things; on form; color; animals; morals and manners. Two or more lessons a day, each from five to eight minutes long.

Repeating verses and maxims, singly and in concert.

Reading from blackboard and from Webb's Charts, with exercises in spelling, both by letters and by sounds. Two or more lessons a day. The six charts completed.

Counting from one to sixty. Simple exercises in adding, with use of numeral frame.

Drawing on the slate, imitating letters, figures, and other objects from Philbrick's Primary School Tablets, Nos. 1, 2, and 9, and from other copies. Printing the

[1] Minutes of the Board of Education.

reading and spelling lessons and the numerals as far as learned. Two or more exercises a day. (All pupils must be provided with slate and pencils.)

Physical exercises as often as once every half-hour; each exercise from three to five minutes.

The recitations in this grade should never exceed twenty minutes in length. In ordinary lessons, fifteen minutes will be time enough, and in some lessons ten minutes.

NINTH GRADE

Oral instruction embracing lessons on parts, form, and color, illustrated by common objects; on animals, mostly those with which the children are already familiar; morals and manners; miscellaneous topics. Two or more lessons a day, each from five to ten minutes long.

Verses and maxims.

Reading and spelling; blackboard exercises continued. Webb's Charts reviewed. Philbrick's Tablets Nos. 15 and 16; *Primer* to Lesson LIV, p. 41, and reviewed. Spelling both by letters and by sounds. The exercise in both reading and spelling to be heard twice a day.

Counting from one to one hundred forward and backward. Reading and writing Arabic numbers to 100. Addition tables from blackboard, 510 forward and backward, in course; also by taking any of the numbers irregularly; with use of numeral frame; Roman numerals to LX both in course and out of course.

Exercises at least twice a day with slate and pencil, using Philbrick's Tablets, Nos. 5, 7, and 10, and other copies; printing-lessons in spelling numerals, etc.

Physical exercises, from two to five minutes at a time, not less than five times a day.

EIGHTH GRADE

Oral instruction: size; general qualities; trades and professions; moral lessons; miscellaneous topics. Two or more oral exercises a day, each from five to twelve minutes long.

Primer completed. *First Reader* to Lesson L, p. 59, and reviewed, with punctuation, definitions, and illustrations; short daily drill in enunciation, using Philbrick's Tablets Nos. 11 and 12. Spelling the columns of words, and words selected from the reading-lessons, both by letters and by sounds.

Drawing and printing: two or more exercises a day with slate and pencil or paper and pencil, using Philbrick's Tablets Nos. 6, 8, 17, and 18, and other copies, and printing-lessons in spelling and arithmetic.

"First Part" to subtraction, p. 18. Extemporaneous exercises in adding series of numbers (see 4th direction); reading and writing Roman numerals to 100.

Physical exercises, from two to five minutes at a time, not less than five times a day.

SEVENTH GRADE

Oral instruction: form; size; weight; animals; the five senses; common things; miscellaneous topics; morals and manners. Two or more oral exercises a day, each from five to twelve minutes long.

Last half of *First Reader* completed and reviewed, with punctuation, definitions, and illustrations. Short daily drill in enunciation, using Philbrick's Tablets, Nos. 11, 12, 13, and 14.

Spelling both by letters and by sounds, from *Speller* to sec. 8, p. 33, and from reading-lessons.

Drawing and printing: two or more lessons a day, using Philbrick's Tablets Nos. 5, 6, 7, 8, 17, 18, 19, and 20, and other copies; and printing-lesson in spelling.

"First Part" to Lesson VI in multiplication, p. 32. Extemporaneous exercises in adding and subtracting series of numbers (4).

Physical exercises, from two to four minutes at a time, not less than five times a day.

SIXTH GRADE

Oral instruction: form; animals; shells; foreign products; miscellaneous topics; common things; manners and morals. Two or more oral exercises a day, each from eight to fifteen minutes long.

Reading and spelling: first half of the *Second Reader* completed and reviewed, with punctuation, definitions, and illustrations. Frequent exercises in enunciation, from Tablets Nos. 11 and 12. Spelling both by letters and by sounds, with definitions from *Speller* to sec. 12, p. 47, and from reading-lessons.

Drawing, writing, etc., with slate and pencil or paper and pencil, using drawing-cards when obtainable, cuts from books, and other copies, writing the large and small letters of the alphabet in plain script hand, using Philbrick's Tablets, Nos. 3 and 4 and Payson, Dunton and Scribner's Chart.

"First Part" in *Arithmetic* completed. Extemporaneous exercises in combining series of numbers (4); reading and writing Arabic and Roman numbers to 1,000.

Abbreviations.

Physical exercises, from two to four minutes at a time, not less than four times a day.

FIFTH GRADE

Oral instruction: form; common things; trees, plants, etc.; geography; miscellaneous topics; morals and manners. Two or more oral exercises a day, each from ten to twenty minutes long.

Reading and spelling: last half of *Second Reader* completed and reviewed, with punctuation, definitions, and illustrations. Frequent exercises in enunciation from Tablets Nos. 11 and 12. Spelling both by letters and by sounds, with definitions, from *Speller* to sec. 16, p. 58, and from reading-lessons.

Drawing, writing, etc., with slate or lead pencil; using cuts from books, drawing-cards when obtainable, and other copies; writing with ink in script hand, from Philbrick's Tablets, Payson, Dunton and Scribner's Chart and in Writing-Book No. 1 or No. 2, or both.

Colburn's *First Lessons*, to sec. 3, p. 41. Multiplication table extended to 12×12 and Division table to $144 \div 12$, in course and out of course. Extemporaneous exercises in combining series of numbers (4); reading and writing Arabic numbers to 10,000.

Abbreviations reviewed.

Declamations and recitations.

Physical exercises, from two to four minutes at a time, not less than four times a day.

FOURTH GRADE

Oral instruction: sound; light; air and water; meteorology; miscellaneous topics; morals and manners. The time devoted to oral instruction each week to be equal in amount to fifteen minutes a day.

Geography from the textbook to Part II, p. 19, and reviewed.

Construction of sentences.

Third Reader to Lesson LXIX, p. 175, with punctuation, definitions and illustrations, and elementary sounds.

Written and oral spelling, with definitions, from *Speller* to sec. 22, p. 90, and from reading-lessons.

Drawing.

Writing in Book No. 2 or No. 3, or both.

Colburn's *First Lessons* to sec. 6, p. 70, and reviewed. Slate arithmetic to long division, p. 64, and reviewed. Extemporaneous exercises in combining series of numbers (4).

Declamations and recitations.

Physical exercises, from two to four minutes at a time, not less than three times a day.

THIRD GRADE

Oral instruction: historical sketches; electricity and magnetism; minerals; morals and manners; familiar exercises in grammar, embracing the parts of speech and construction of sentences. The time devoted to oral instruction each week to be equal in amount to fifteen minutes a day.

Geography, to commerce of U. S., p. 50, and reviewed, with map-drawing.

Larger Grammar to the verb, p. 66, with lessons in the use of language—to follow oral exercises in grammar.

Third Reader completed and *Fourth Reader* to Lesson XLVII, p. 125, with punctuation, definitions and illustrations, and elementary sounds.

Written and oral spelling, with definitions, from *Speller* to sec. 25, p. 119, and from reading-lessons.

Writing in Book No. 3 or No. 4, or both.

Colburn's *First Lessons*, to sec. 12, p. 106, and

reviewed. Slate arithmetic to addition of denominate numbers, p. 119, and reviewed. Extemporaneous exercises in combining series of numbers (4).

Declamations and recitations.

Physical exercises, from two to four minutes at a time, not less than three times a day.

SECOND GRADE

Oral instruction: properties of matter; laws of motion, etc.; physiology and hygiene; morals and manners. The time devoted to oral instruction each week to be equal in amount to fifteen minutes a day.

Grammar, to classification of sentences, p. 118.

Compositions, abstracts, and written reviews.

Geography to Asia, p. 76, and reviewed, with map-drawing from memory.

History of the United States, to the Revolution, p. 145, and reviewed.

Fourth Reader complete, with punctuation, definitions and illustrations, and elementary sounds.

Written and oral spelling with definitions, from *Speller* to sec. 28, p. 138, and from reading-lessons.

Writing in Book No. 4 or No. 5, or both.

Colburn's *First Lessons* completed and reviewed. Slate arithmetic to analysis, p. 201, and reviewed. Extemporaneous exercises in combining series of numbers (4).

Declamations and recitations.

Physical exercises, from two to four minutes at a time, not less than three times a day.

FIRST GRADE

Oral exercises: popular astronomy; elementary bookkeeping; government; heat; geology; morals and

HIGH SCHOOL

Synopsis of the General Course

Year	First Term	Second Term	Third Term
I	Algebra German or Latin Descriptive Geography	Algebra German or Latin Eng. Grammar and Analysis	Arithmetic German or Latin Physical Geography
II	Algebra German or Latin Universal History	Geometry German or Latin Universal History	Geometry German or Latin Universal History Botany
III	Geometry German, Latin, or French Physiology Rhetoric	Trigonometry German, Latin, or French Natural Philosophy English Literature	Mensuration Navigation and Surveying German, Latin, or French Natural Philosophy English Literature
IV	Astronomy German, Latin, or French Intellectual Philosophy Constitution of United States Bookkeeping	Chemistry German, Latin, or French Logic Political Economy	Geology and Mineralogy German, Latin, or French Moral Science Political Economy

Reading during the first and second years. Drawing during the second, third, and fourth years. Composition and declamation throughout the entire course.

HIGH SCHOOL

Synopsis of the Classical Course

Year	First Term	Second Term	Third Term
I	Algebra Harkness' *First Latin Book* Descriptive Geography	Algebra Harkness' *First Latin Book* English Grammar and Analysis	Arithmetic Latin Reader Physical Geography
II	Algebra Latin Reader Universal History	Geometry Caesar Universal History	Geometry Caesar Universal History Botany
III	Greek Caesar or Cicero Physiology	Greek Cicero Natural Philosophy	Greek, *Anabasis* Cicero Natural Philosophy
IV	Greek, *Anabasis* Virgil, *Eclogues* Cicero Latin Prose	Greek Virgil, *Aeneid* and *Georgics* Latin Prose	Greek, *Iliad* Virgil, *Aeneid* Review of Latin

Reading during the first and second years. Drawing, the second, third, and fourth years. Composition and declamation during the entire course. Classical antiquities, military affairs, during the second year. Classical antiquities, civil affairs, during the third year. Classical antiquities, mythology, during the fourth year.

manners. The time devoted to oral instruction each week to be equal in amount to fifteen minutes a day.

Grammar completed, with parsing and analysis from reading-book.

Compositions, abstracts, and written reviews.

Geography completed and reviewed, with map drawing from memory and use of terrestrial globe.

History of the United States, completed and reviewed. Outlines of English history, with review.

First-Class Reader, with explanations, analysis of derivative and compound words, and elementary sounds.

Written exercises in spelling from reading-lessons, and other words selected by the teacher. Analysis of derivative and compound words, and a few selected rules of spelling.

Writing-Books selected from Nos. 5, 6, 7, 8, 9, 10, and 11.

Slate arithmetic completed and reviewed. Extemporaneous exercises in combining series of numbers (4); difficult examples of Colburn's *First Lessons* reviewed.

Declamations and recitations.

Physical exercises, from two to four minutes at a time, not less than three times a day.

The following tabular outline of the present course of study is accompanied in the published school programme with full and detailed specifications as to the way in which each subject is to be developed. It would otherwise be without much significance as showing any change in the aim and content of education.

COURSE OF STUDY FOR THE ELEMENTARY SCHOOLS OF CHICAGO, 1909–10

TIME SCHEDULE

SUBJECT	GRADES							
	I Min.	II Min.	III Min.	IV Min.	V Min	VI Min.	VII Min.	VIII Min.
Opening exercise	25	25	25	25	25	25	25	25
English	775	775	600	435	410	410	410	410
History and civics	...	...	...	...	90	90	160*	160
Mathematics	...	...	250	250	160	160	160	160
Singing	75	75	75	75	90	90	90	90
Geography	...	...	...	200	150	150	160*	...
Nature-study	100	100	100	60	60	60	60	60
Writing	60	75	75	75	60	60	50	50
Drawing	90	90	90	90	90	90	90	90
Manual training	150	150	90	90	90	90	180	180
Physical culture	100	180	75	75	50	50	50	50
Recesses	125	125	125	125	125	125	125	125
Study period	...	...	...	...	100	100	100	100

* Geography first half of year. History last half. The programme to be arranged to provide time for German or Latin in schools where these subjects are taught.

The following descriptive analysis of the methods followed in one subject is given in detail to illustrate the adaptation of the course of study to the child's need:

HISTORY AND CIVICS

History and civics, in first, second, third, and fourth grades, should be treated as English, and time taken from that allotted to English.

Emphasize biographies and strive to connect the common experiences of life with the school-work in this and other subjects. Many of the topics on institutional life can be taught only when occasion favors; others can be taught at any time.

Every opportunity should be utilized to teach children to respect the personal and property rights of others, as well as the duty of protecting public property, and the legal and social relations existing between the public and public officials.

FIRST GRADE

Stories illustrating phases of social life.

Historic anniversaries—Thanksgiving, Christmas, Washington's Birthday, Lincoln's Birthday, Decoration Day.

Institutional life: make selections from the following topics: *trades and occupations*—baker, carpenter, mason, plumber, dressmaker, blacksmith, expressman; *public servants*—lamplighter, garbage man, street sprinkler, policeman, engineer, janitor, teacher, principal, etc.

SECOND GRADE

Stories of real or ideal people.

The historical national anniversaries.

Institutional life: study of types of primitive life, of which ours is a development, such as the hunter and trapper, the shepherd, the farmer, the potter, the spinner, and the weaver.

THIRD GRADE

Teach phases of social life by means of stories and material chosen from explorations, our colonial history, and from Greek and Teutonic mythology and history.

Anniversaries as in first and second grade.

Organized civic institutions: fire department; army and navy.

Current events.

FOURTH GRADE

History of Illinois.

Indians of Illinois.

Explorers—Marquette, Joliet, and La Salle.

History of Chicago—historic places, incidents, statues, or monuments in the city.

James Watt and George Stephenson and the steam engine; Robert Fulton and the steamboat; Samuel F. B. Morse and the telegraph; Eli Whitney and the cotton gin; Cyrus McCormick and the reaper; Cyrus Field and the Atlantic cable.

National anniversaries to be used as centers for related history.

Civic institutions: life-saving service; lighthouse service; post-office service.

Current events.

FIFTH GRADE

Biographies: make selections from the following list: Columbus, De Soto, Drake, John Smith, Miles Standish, William Penn, Benjamin Franklin, Lafayette, Daniel Boone, Lewis and Clarke, Andrew Jackson, Commodore Perry, General Scott, General Grant, Commodore Farragut, Admiral Dewey, John Paul Jones, George Rogers Clarke.

Indians—mound-builders, cliff dwellers.

Civics—work of policeman, fireman, teacher, and other public officers.

Institutions for care of sick, insane, blind, aged and helpless, unfortunate poor, orphans.

Water and sewage systems; public parks and playgrounds.

Current events.

SIXTH GRADE

A general view of the whole course of United States history. No intensive study of any portion. Use the textbook as a reader, finishing the book.

Civics: prior to all election days discuss with the children forms of government of city, county, state, and nation: offices; method of nomination and election of officers; how the statutes of the state and city are made and enforced; duty of citizens, including children, to obey all laws.

Teach responsibility of citizens, including children, for a beautiful city, so far as home yards and streets are concerned, both as to planting and cleanliness, back yards and alleys; gardening; all having to do with civic life.

The school premises as a center of influence.

Study of current events as in preceding grades.

SEVENTH GRADE

Study of the following topics with a view to preparing for more careful study of American history: sketch of feudalism, manorial and castle life, especially applied to England; stories of the crusades, as to their effect in enlarging the mental horizon of Europe and their stimulation of commercial enterprise; the story of Venice and Genoa as commercial cities, and the transfer of trade to the Hanseatic cities of the Atlantic coast; the fall of Constantinople, as to its effects upon commerce; inventions, such as mariner's compass, printing, gunpowder, sextant, etc.; sketch growth of English constitutional guaranties, such as Magna Charta, Petition of Right, Bill of Rights, organization of House of Commons, etc.

Study of history of the United States to the constitutional period, 1789.

Study of current events, as in preceding grade.

EIGHTH GRADE

A connected study of United States history from the close of the Revolution to the present time.

Study growth of ideas of popular representation in the American colonies, developed in New England in the town meeting, and elsewhere in legislative bodies legalized by charters.

Study increase of freedom under the English government, beginning with Magna Charta, its influence on the colonies (see Seventh Grade).

Compare English freedom of the individual with American.

Study formation of Constitution, comparing it with the Articles of Federation, state constitution, and city charter.

Study territorial growth, industrial and social development.

Current events.

Turning to the high school of the present time, the course of study shown in the table on opposite page is offered.

The choice from among the studies offered must be made subject to the following limitations:

A complete curriculum consists of sixteen credits, one credit to be given for a study pursued successfully five days a week for forty weeks; fractional credits for studies pursued

a proportionately less time. For graduation the requirements are three and one-half con-

CHICAGO HIGH SCHOOLS

COURSE OF STUDY, 1909

Subject	First Year		Second Year		Third Year		Fourth Year	
	No. of Recitations per Week	No. of Weeks	No. of Recitations per Week	No. of Weeks	No. of Recitations per Week	No. of Weeks	No. of Recitations per Week	No. of Weeks
English	4	40	4	40	4	40	4	40
Latin	4	40	5	40	5	40	5	40
German	4	40	5	40	5	40	5	40
French	4	40	5	40	5	40	5	40
Spanish	4	40	5	40	5	40	5	40
Greek	.	..	5	40	5	40	5	40
Mathematics	4	40	4	40	4	40	4	40
Physiography	6	30	.	..	.	...	.	..
Physiology	4	10	.	..	.	..	.	..
Accounting	6	40	6	40	.	..	.	..
Biology	.	..	6	40	.	..	.	..
Stenography and typewriting	.	..	6	40	6	40	.	..
Civics	.	..	.	..	.	..	4	20
History	.	..	4	40	8	40	4	40
Physics or chemistry	.	..	.	..	6	40	6	40
Commercial geography	.	..	.	..	4	40	.	..
Geology	.	..	.	..	.	..	4	20
Astronomy	.	..	.	..	.	..	4	20
Commercial law	.	..	.	..	.	..	4	20
Economics	.	..	.	..	.	..	4	20
Drawing	2	40	2	40	2	40	2	40
Music	1	40	1	40	1	40	1	40
Physical culture	1	40	1	40	1	40	1	40
Domestic science and arts	6	50	6	50	6	50	6	50

secutive years of English; two consecutive years of some foreign language; two consecu-

tive semesters of mathematics; four semesters of science; and two semesters of history.

Here, as in the case of the Boston course of study, the programme of the high school suggests several rather definite groups of students. The requirements of those who are going to college, into business, or into positions of a clerical nature are well met. For those who have no such definite programme, or who need to have suggestion come through the hand by doing rather than through the eye or the ear, little provision has been made.

For such girls as will probably remain at home and would like to become intelligent consumers the following course has been introduced:

COURSE IN DOMESTIC SCIENCE IN CHICAGO HIGH SCHOOLS, 1909

I. RECITATION AND GENERAL REFERENCE

A. *Kitchen—arrangement, care*

1. Selection, use, and care of utensils, tables, sinks, refrigerators, etc.
2. Stoves, fuels, and fires.

B. *Physiology*

With special reference to digestion, narcotics, and stimulants.

C. *General classification of foods*

1. Incombustibles—water, mineral matter.
2. Combustibles—nitrogenous, carbonaceous.

D. *Effect of dry or moist heat on* C 1, 2

E. *General study of foods*

1. Change produced by cooking.
2. Digestibility.
3. Meeting the needs of the body.
4. Nutritive value of different foods.
5. Inexpensive foods and their nutritive value.
6. Attractive preparation of foods, particularly inexpensive foods.
7. Methods of keeping foods fresh (refrigeration); effect on the food.
8. Methods of preserving food.
9. Adulterations—harmless, harmful.

F. *Marketing.* Study of quality, purity, condition, and cost relative to nutritive value

1. Vegetables.
2. Dairy products and their substitutes.
3. Eggs.
4. Meats.
5. Fruits.
6. Manufactured foods.

G. *Dining-room—arrangement, care*

1. Laying table.
2. Serving foods.
3. Serving a meal—breakfast, dinner, or luncheon. (Cost of meals to be limited to a specified sum.)
4. Duties of host, hostess, waiter, or waitress.

II. LABORATORY WORK

1. *Incombustibles*

a) Water—filtration, softening, hardening.

b) Mineral matter—salt, phosphate, or lime, etc.

2. *Combustibles* (animal and vegetable foods)
   - *a*) Eggs—cooked in various ways.
   - *b*) Milk—its uses in the preparation of other foods. Study of milk, butter, cream, cheese.
   - *c*) Vegetables and fruits—kinds of; steaming, boiling, baking.
   - *d*) Cereals—methods of preparation for table (including made-overs).
   - *e*) Oils and fats.
     - (1) Vegetable oils—olive, nut, chocolate, cotton-seed, cottolene, etc.
     - (2) Animal fats—lard, suet, tallow, etc. Use in cooking.
   - *f*) Fish—the different kinds of; methods of cooking.
   - *g*) Meats—the different kinds of: relative value as food; the different cuts: relative value as food; methods of cooking; carving.
   - *h*) Soups—with stock (study in connection with meats); without stock.
   - *i*) Grains—flour, various kinds; batters, doughs, leavens.
   - *j*) Cakes, cookies, pastry, puddings.
   - *k*) Salads—vegetable, meat, and fruit; dressing adapted to each kind; garnishment.
   - *l*) Beverages.
     - (1) Not requiring cooking.
     - (2) Requiring cooking.
   - *m*) Frozen mixtures—various kinds.
   - *n*) Bacteria, fermentation, and sterilization; canning, jelly-making, preserving, and pickling; advantages of the various methods.

During the second year, earlier, if possible, a careful study of food values must be made. The information gathered in the daily work must be brought together and fully tabulated.

Study standard dietaries, actual dietaries, e.g.:

a) Make ideal dietaries for the infant, child, high-school pupil, adult, day laborer, sedentary person, invalid, etc.

b) Feed a day laborer, wife, and three children, with five dollars a week.

Household accounts are to be begun in the first year, and continued throughout the course. Each pupil is to keep an account for a family of the size of the one to which the pupil belongs.

The last semester of this course is devoted to the consideration of the following topics:

a) Sanitation:
Location of the house.
Ground plans.
Water supply.
Drainage and plumbing.
Ventilation.
Lighting.
Heating.

b) Household furnishings:
Decorations.
Equipment of various rooms
Care of.

c) Emergencies.

d) Personal hygiene

This course extends through the four years of the high school, using per week six periods of fifty minutes.

There is in addition a course in sewing and textiles whose object is to give a practical knowledge of the various textile fabrics used in the modern home, and to train the eye and the hand to make up these fabrics in an economical and artistic manner.

These subjects may be substituted for any of those mentioned in the course of study except those required for graduation.

CHAPTER XII

A WOMAN'S COLLEGE

In 1861 a great step forward in the education of women was taken by the founding of Vassar Female College. At the first meeting of the Board of Trustees, held on February 21, 1861, the founder, Mr. Matthew Vassar, made an address in which he manifested a liberality and breadth of view, an insight into the needs of young women, and an advanced position upon educational topics remarkable for his or any day. The following statements are quoted as indicating his aims in founding the new institution:

It having pleased God that I should have no descendants to inherit my property, it has long been my desire, after suitably providing for those of my kindred who have claims upon me, to make such a disposition of my means as should best honor God and benefit my fellow-men. At different periods I have regarded various plans with favor, but these have all been dismissed, one after another, until the subject of erecting and endowing a college for the education of young women was presented for my consideration. The more carefully I examined it, the more strongly it commended itself to my judgment and interested my feelings. It seemed to me that woman,

having received from her Creator the same intellectual constitution as man, has the same right to intellectual culture and development. . . . . I have come to the conclusion that the establishment and endowment of a college for the education of young women is a work which will satisfy my highest aspirations and will be, under God, a rich blessing to the city and state, to our country and the world.

I wish that the course of study should embrace at least the following particulars: The English Language and its Literature; other Modern Languages; the Ancient Classics, so far as may be demanded by the spirit of the times; the Mathematics, to such an extent as may be deemed advisable; all the branches of Natural Science with full apparatus, cabinets, collections, and conservatories for visible illustration; Anatomy, Physiology, and Hygiene, with practical reference to the laws of the health of the sex; Intellectual Philosophy; the elements of Political Economy; some knowledge of the Federal and State Constitutions and Laws; Moral Science, particularly as bearing on the filial, conjugal, and parental relations; Aesthetics, as treating of the beautiful in Nature and Art, and to be illustrated by an extensive Gallery of Art; Domestic Economy, practically taught, so far as is possible, in order to prepare the graduates readily to become skilful housekeepers; last, and most important of all, the daily, systematic reading and study of the Holy Scriptures, as the only and all-sufficient rule of Christian faith and practice.[1]

These wishes of the founder were, however, not carried out in full in the curriculum which

[1] L. P. Brockett, *Men of Our Day*, p. 637.

was adopted when the college opened on September 20, 1865. This fact is explained briefly by the following statement made by President John Howard Raymond, who was called to the presidency in 1864:

> While the education for men has outgrown the old college system and is demanding room for expansion and free development in various directions, that for women has but just grown up to it and needs for a season the bracing and support of its somewhat narrow forms.[1]

Again, the following statement was made by President Raymond in 1875 at the end of the first decade of the life of the College:

> In the discussion of these questions, educational, social, religious, political, Vassar College takes no sides. Its business is education. The only thing that we ask of our pupils is that there should be thought, honest and earnest; and the aim of our training is, not to inculcate a particular creed or system of belief, but to furnish the youthful mind with the well-established and undisputed results of past inquiry, to inform it clearly in respect to the great questions in philosophy and science which now divide the thinking world, and so to develop and discipline its faculties that it shall be able in due time to form its own opinions and to understand and explain the grounds on which those opinions rest.[2]

[1] *Life and Letters of John Howard Raymond* (published by Fords, Howard and Hulbert, New York), p. 584.

[2] *Ibid.*, p. 598

Views similar to those expressed by President Raymond as to the necessity of "bracing" the woman's college by adopting the programme theretofore prevailing in the colleges for men dominated the counsels of those who were later engaged in formulating the policy of other women's colleges. In view of these facts the curriculum of Vassar takes on a special interest.

Applicants for admission to the college were required to be at least fifteen years of age and to furnish satisfactory testimonials of character. They were required to pass a satisfactory examination in the ordinary English branches, and candidates for the first year of the regular course were examined to a certain extent in Latin, French, and Algebra.

The curriculum of Vassar College for 1867–68 was announced as follows:

There are two regular courses of study pursued in the college, the Classical and Philosophical Course, and the Scientific and Modern Language Course, and between these each student is allowed her choice.

Classical Course

FRESHMAN YEAR

First Semester—

Latin.—Livy; Arnold's *Prose Composition.*

Greek.—Felton's *Historians;* Kühner's *Grammar, Syntax;* Arnold's *Prose Composition.*

Mathematics.—Robinson's *University Algebra.*

English.—Exercises in composition.

Second Semester—

Latin.—Cicero's *De Senectute et Amicitia; Prose Composition.*

Greek.—Homer's *Iliad,* six books; Kühner's *Grammar; Prose Composition.*

Mathematics.—Loomis' *Geometry.*

English.—Exercises in grammatical analysis.

SOPHOMORE YEAR

First Semester—

Greek.—Sophocles' *Ajax; Prose Composition.*

Mathematics.—Loomis' *Trigonometry.*

English.—Whately's *Rhetoric;* compositions.

Second Semester—

Latin.—Horace's *Odes* and *Art of Poetry.*

Greek.—Aeschylus' *Agamemnon; Prose Composition.*

Natural history.—Gray's *Botany; Lectures on Zoölogy.*

English.—Exercises in etymology and synonyms; compositions.

JUNIOR YEAR[1]

First Semester—

French.—Fasquelle's *Grammar and Reader.*

Latin.—Tacitus' *Germania and Agricola.*

Natural philosophy.—Silliman's *Physics,* Parts I and II.

Geology and physical geography.—Lectures.

[1] In the Junior and Senior years, each student elects three of the studies laid down for each semester, subject to the approval of the faculty. The studies omitted may be taken up in a post-graduate year, and in this way the entire course may be completed.

Logic and political economy.—Whately and Wayland.

English.—Lectures on the history of the English language.

Second Semester—

French.—Molière's *Tartuffe*, or Racine's *Athalie.*

Greek.—Plato's *Phaedon.*

Mathematics.—Loomis' *Analytical Geometry and Calculus.*

Natural philosophy.—Silliman's *Physics.*

English.—Shaw's *Manual of English Literature.*

SENIOR YEAR

First Semester—

Intellectual philosophy.—Haven.

Anatomy.—Gray.

Chemistry.—Stöckhardt and Wells.

Astronomy.—Robinson's *Astronomy* begun.

German.—Woodbury's *Method;* Adler's *Reader.*

Italian.—Grammar and Reader.

Latin.—Cicero's *Tusculan Disputations.*

Second Semester—

Moral philosophy.—Wayland.

Physiology.—John C. Draper.

Astronomy.—Robinson's, completed.

Criticism.—Kames's *Elements.*

Languages.—German (Goethe's *Iphigenia*); Italian (Dante); or Greek (lyrical poets).

SCIENTIFIC COURSE

FRESHMAN YEAR

First Semester—

Latin.—Livy; Arnold's *Prose Composition.*

French.—Poitevin's *Grammaire;* Larousse's *Lexi-*

cologie, *L'année*, and Howard's *Aids to Composition* begun. Scribe and Racine.

Mathematics.—Robinson's *University Algebra* completed.

English.—Exercises in Composition.

Second Semester—

Latin.—Cicero's *De Senectute et Amicitia; Prose Composition.*

French.—Poitevin's *Lexicologie*, *L'année*, and Howard's *Aids* completed; Racine and Souvestre.

Mathematics.—Loomis' *Geometry.*

Botany.—Gray's *Lessons and Manual*, with excursions.

English.—Exercises in analysis.

SOPHOMORE YEAR

First Semester—

French.—Poitevin's *Syntaxe* and *Exercises; Lexicologie*, 2e *Année* begun; Corneille.

Mathematics.—Loomis' *Trigonometry.*

Geology and mineralogy.—Lectures, with laboratory practice and excursions.

English.—Whately; compositions.

Second Semester—

German.—Woodbury's *New Method*, Part I, begun; Adler's *Progressive Reader.*

French.—Fleury's *Histoire de France; Lexicologie* completed; Molière and Töpffer.

Mathematics (elective with French).—Loomis' *Analytical Geometry and Calculus.*

Zoölogy.—Lectures, with laboratory practice and excursions.

English.—Exercises in etymology and synonyms; compositions.

JUNIOR YEAR

First Semester—

German.—Woodbury, Parts I and II; Schiller's *Wilhelm Tell.*

French.—Poitevin's *Analyse logique;* Sommer's *Manuel de style*, and Demogeot's *Histoire de la littérature*, begun; translations.

Natural philosophy.—Silliman's *Physics*, Parts I and II.

Physical geography.—Lectures.

Astronomy.—Robinson's, begun.

English.—Lectures on the history of the English language.

Second Semester—

German.—Woodbury completed; Schiller's *Wallenstein;* English into German; etymology and synonyms.

French.—Poitevin, Sommer, and Demogeot completed; free compositions; translations.

Astronomy.—Robinson's, completed.

Natural philosophy.—Silliman's *Physics* completed.

English.—Shaw's *Manual of English Literature.*

SENIOR YEAR

First Semester—

Intellectual philosophy.—Haven.

Anatomy.—Gray.

Chemistry.—Stöckhardt and Wells.

Astronomy.—Pierce's *Spherical*, begun.

German.—Goethe's *Torquato Tasso;* free compositions.

Italian.—Grammar and Reader.

Logic and political economy.—Whately and Wayland.

Second Semester—

Moral philosophy.—Wayland.
Physiology.—J. C. Draper.
Astronomy.—Pierce's, completed.
Criticism.—Kames's *Elements*.
Languages.—German, Italian, or French literature.

ART STUDIES

Students will usually be able to take one art study in addition to the regular course, and are strongly advised to do so, when it is possible, as an important element of education. In the Junior and Senior years, after the completion of the more disciplinary studies, proficiency in music or the arts of design may be accepted as an equivalent for some one of the prescribed studies in literature or science.

A comparison of the two courses of study shows that the classical was differentiated from the scientific chiefly by the requirement of Greek. In both courses the other foreign languages studied were the same, viz., Latin, French, German, and Italian, and in both the same sciences, viz., botany, zoölogy, geology, physics, anatomy, chemistry, astronomy, and physiology, though taken up in a slightly different order and possibly with a little more detail in order to offset the omission of Greek.

In 1908–9 the requirements for admission were as follows:

Candidates for the Freshman class must pass examinations in the following subjects as described in detail

in the college catalogue: English; history; algebra; geometry; Latin; second foreign language: Greek or German or French; third foreign language: German or French; or science: physics or chemistry.

Such requirements as these show clearly the necessity of making a decision in regard to going to college early in the school course, as otherwise the specific studies might not be taken. The completion of a full high-school course would not in and of itself fit the student for work of a collegiate grade.

The following courses are required of all candidates for the Bachelor's degree (each three hours per week through the year unless otherwise stated):

English	Freshman year
Mathematics	Freshman year
Latin or Greek	Freshman year
French or German	Freshman or Sophomore year
History	Freshman or Sophomore year
Physics or chemistry	Freshman or Sophomore year
Philosophy	First semester, Junior year
Ethics	First semester, Senior year

Freshmen are required to take 15 hours per week.

Sophomores, 15 hours in the first semester; 14 or 15 in the second.

Juniors, 14 or 15 hours per week.

Seniors, 12 to 15 hours per week.

All elections are subject to the approval of the faculty.

Elections should be made so carefully that changes will not be necessary.

Students who offered at entrance the "extra year" of modern languages must elect at some time during the course a year of another modern language.

Those who offered science in place of a modern language must elect a year of science, three hours per week.

Not more than 5 courses may be taken in one semester.

Not more than 6 hours may be taken in one department in any semester.

Unless otherwise stated, all courses are open to Sophomores.

Two beginning courses in modern languages may not be elected for the same year.

There were offered at Vassar College during the year 1908–9 the following number of hours of instruction per week: philosophy, 21; history, 35½; economics and sociology, 13; Bible, 8; art, 6; music, 12; Latin, 29½; Greek, 27½; French, 26; Italian, 6; Spanish, 6; German, 30; English, 44; mathematics, 26½; astronomy, 12½; physics, 16; chemistry, 26½; geology, mineralogy, and paleontology, 14½; biology, 12; physiology and hygiene, 4.

The following specific courses were given:

PHILOSOPHY: introduction to philosophy; ethics; modern idealism with reference to Kant and the post-Kantians; present-day problems of philosophy; aesthetics; history of ancient philosophy, with special emphasis on Plato; American philosophy; introductory psychology; introductory laboratory psychology; special problems in laboratory psychology; social psychology; genetic psychology; education; materialism.

HISTORY: general European history; American history; English political history; the French Revolu-

tion; contemporary history; ancient history; the literature of American history; history of Northern Europe; modern Russia; nineteenth-century history; prehistoric Europe; history of British colonization; the modern British constitution; history of the civil service in the United States; the nature and treatment of historical material.

ECONOMICS AND SOCIOLOGY: principles of economics; economic history; modern industrial organization; labor problem and socialism; charities and corrections; economic seminar; the tariff question in the United States; economic and social problems of city life.

BIBLE: the history of Israel (pre-exilic); the history of Israel (post-exilic); the life of Christ; the Apostolic Age; the history of religions; Christian evidences.

ART: the history of ancient art; the history of mediaeval and renaissance architecture; the history of Italian painting; the history of renaissance and modern painting.

MUSIC: elementary theory; the historical development of music; great composers and their works; counterpoint; historical form; interpretation.

LATIN: Livy; Ovid; Terence; Horace, *Odes and Epodes, Satires and Epistles;* Cicero, *Letters, Verrine Orations, De Senectute;* Virgil; Pliny, *Letters;* Roman Comedy; Tacitus, *Agricola and Germania, Annals;* Catullus; Roman elegy; Juvenal; Latin composition; translation of Latin at sight; Rome and Roman life; topography and buildings of Rome; an introduction to comparative philology; historical grammar; Latin epigraphy; Latin paleography.

GREEK: Lysias; Homer, *Odyssey;* elementary Greek; the New Testament; Demosthenes; Euripides; Thucydides; Aristophanes; Sophocles; Plato; Aristotle;

Aeschylus; Pausanias; modern Greek; advanced course in writing Greek; Greek sculpture; Greek vases and coins; ancient Greek life.

FRENCH: elementary and general courses; reading and study of French provincial literature; textual reading and study of the lyrical poetry of the 19th century; literature of the eighteenth century; critical and historical study of the French drama; Old French; contemporary literature; advanced grammar and composition.

ITALIAN: elementary Italian; classical Italian.

SPANISH: elementary Spanish; classical period.

GERMAN: elementary and general courses; introduction to classical literature of eighteenth century; Goethe, his life and works; German literature in the first half of the nineteenth century; critical and aesthetic writings of the classical period; Goethe's *Faust;* modern German drama; contemporary German drama; German novel of the nineteenth century; Middle High German; advanced grammar and composition; German conversation.

ENGLISH: exposition; narrative writing; critical writing; descriptive writing; argumentation; literary criticism; poetics; English lyric poetry; development of English literature from Beowulf to Johnson; Old English; Chaucer; nineteenth-century poetry; nineteenth-century prose; Shakespeare; development of the English drama; history of Shakespeare criticism; American literature; classic and romantic movements.

MATHEMATICS: solid and spherical geometry; algebra and plane trigonometry; analytic geometry; advanced algebra; elementary calculus; integral calculus; determinants and theory of equations; curve tracing; modern methods of analytic geometry; projective geometry;

analytic mechanics; higher algebra and Galois' theory of equations; surfaces and curves of the third order; theory of functions of a complex variable.

ASTRONOMY: descriptive astronomy; observational astronomy; general astronomy; theory and use of the transit instrument; theoretical astronomy; variable stars; selected problems in theoretical astronomy.

PHYSICS: general experimental physics; descriptive and experimental physics; electricity and magnetism; modern developments in electricity; radiation; sound; general descriptive physics; thermodynamics; theory of light.

CHEMISTRY: general chemistry; qualitative analysis; quantitative analysis; organic chemistry; organic preparations; analysis of foods; history of chemical theory; elementary physiological chemistry; theoretical chemistry.

GEOLOGY, MINERALOGY, AND PALEONTOLOGY: physiographic geology; stratigraphic geology; advanced geology; special readings; systematic and determinative mineralogy; physical mineralogy; optical crystallography; petrography; climatology.

BIOLOGY: general biology; invertebrate zoölogy; embryology; special readings; comparative anatomy of vertebrates; cytology and histology; plant morphology; plant embryology and physiology.

PHYSIOLOGY AND HYGIENE: advanced human physiology; municipal and house sanitation.

This enumeration is of interest when compared with the original curriculum as showing scarcely more recognition of the principles laid down by the founder, in spite of the greatly

increased number of courses. Some "particulars" mentioned by him, notably domestic economy, do not appear at all; some, like anatomy, physiology, and hygiene, are given a very small place, while others, like those relating to citizenship and family relations, are but incidentally treated and not formally recognized at all. In view of these facts it is proper to note some of the educational facilities which are supplementary to the courses of instruction.

All new students are required to attend six lectures in personal hygiene. There are in addition miscellaneous lectures and concerts. A physician and two assistant physicians reside in the college. The health of the students is made a chief object of attention, and the sanitary regulations of the college are all carefully directed. Physical exercise three times weekly is prescribed. The grounds, with tennis courts and an athletic field, and a lake for boating and skating furnish facilities for outdoor recreation. The gymnasium, in addition to the usual equipment, furnishes a hall for winter sports and for entertainments. In the residence halls there are sleeping-rooms, dining-rooms, and reception rooms. The library contains 63,000 volumes, and 250 periodicals are currently received. Regular services are conducted in the chapel

on Sundays, and evening prayer is held daily. Voluntary religious meetings and classes for Bible and mission study are held. The students maintain classes for the maids employed in the college. Various societies and clubs give variety to the college life. The Philalethean Anniversary and Founder's Day furnish occasion for a more general social life. The enforcing of the regulations agreed upon in regard to all matters affecting the comfort of the college life is intrusted to a committee appointed by the Students' Association which includes all undergraduates.

CHAPTER XIII

A STATE UNIVERSITY

In 1867 the normal department of the University of Wisconsin was announced for the last time. Its women students had been allowed "to attend all university lectures and in addition to the course of study prescribed for graduation elect any study in the college of arts or letters."[1]

Under authority granted to the regents by special act of the legislature the new president substituted a "female college," the terms of admission to which were stated as follows in the catalogue for 1868–69:

> Young ladies desiring to enter upon the first year of the following course of instruction must pass a satisfactory examination in the outlines of geography, elements of English grammar, and in arithmetic to proportion.
>
> Those applying for advanced standing must pass examination in all the studies to which the class which they propose to enter have attended, or others equivalent to them.
>
> Ladies may be admitted to this department and allowed to select any three studies of the term which

[1] *Report of the Regents of the University of Wisconsin for the Year Ending September 20, 1867*, p. 10; also, to the same effect, see catalogues published from 1863 to 1867.

they are qualified to pursue; but no extra classes will be formed except in elective studies.

The faculty consisted of seven members including the president, the preceptress, the associate preceptress, the teacher of music, and the teacher of drawing and painting. In 1868–69, 150 students were enrolled. The course of study was announced as follows:

First Year

FIRST TERM

Mathematics.....Higher arithmetic.
English Language Verbal and sentential analysis.
Geography.....Descriptive, map-drawing.
General exercises.

SECOND TERM

Mathematics.....Arithmetic, completed.
English Language Analysis and composition.
Geography.....Descriptive, map-drawing.
General exercises.

THIRD TERM

Mathematics.....Elementary algebra.
Geography.....Physical.
History.....United States.
General exercises.
Reviews.....Studies of the year.

Second Year

FIRST TERM

Mathematics.....Elementary algebra, completed.
Language.....Craik's *English of Shakspeare.*

Science.....Botany.
History.....Ancient.

Elective.....French, Latin.

SECOND TERM

Mathematics.....Plane geometry.
Science.....Physiology.
History.....Mediaeval.
General exercises.

Elective.....French, Latin.

THIRD TERM

Mathematics.....Solid geometry.
English Language Rhetoric.
Natural Science...Botanical analysis.
History.....Modern.
Reviews.....Studies of the year.

Elective.....French, Latin.

THIRD YEAR

FIRST TERM

Mathematics.....Higher algebra.
English Language Criticism and literature
Natural Science....Zoölogy.
General exercises.

Elective.....Latin, German.

SECOND TERM

Mathematics.....Higher algebra, completed.
English Language Literature.
History of English literature—lectures.

Polity.....Constitution and science of government.
Political Economy.

Elective.....Latin, German.

THIRD TERM

Philosophy.....Natural.
Philosophy.....Mental.
Mathematics.....Plane trigonometry.
Reviews .....Studies of the year.

Elective.....Latin, German.

Fourth Year

FIRST TERM

Mathematics.....Spherical trigonometry.
Natural Science....Chemistry.
Philosophy.....Moral.

SECOND TERM

Natural Science....Astronomy.
Geology.
Philosophy.....Moral.
History.....Civilization—Guizot.

THIRD TERM

Aesthetics.....Bascom.
Natural Theology Chadbourne.
Evidences.....Lectures.
Essays and reviews.

Elective.....Ancient and modern languages throughout the year.

The following "special information" was given:

In addition to the prescribed course in this college young ladies will be instructed in any study taught in the College of Letters or Arts for which they are prepared. They may also attend all university lectures.[1] Instruction in this department will be given by the President and professors of the University as their services are required.

Students who do not desire to graduate may enter at any time and pursue any study of the term for which they may be prepared.

ACCOMMODATIONS

For the present the South College Building will be occupied by the members of this college, and will be under the immediate charge of the Preceptress, who, with her associate teachers, will reside in the building.

This edifice has rooms for the accommodation of about eighty ladies. Besides these private rooms there are others for the use of pupils in music, painting, and drawing; also a commodious and well-furnished hall for the use of the Castalian Society, organized by the ladies of this college.

BOARDING

Board will be furnished in the building for $3.00 per week, and furniture can be rented for one dollar per term.

[1] "The term, 'university lectures,' here referred to class lectures in various subjects, some of which were taught in this way only, thus giving to women all the instruction available, with the only difference of separate examinations."—Helen R. Olin, *The Women of a State University* (G. P. Putnam's Sons, New York and London), p. 45.

Rooms will be rented in the building to ladies desiring to board themselves. They will be under the same regulations as those who board with the teachers.

The somewhat vague statement was made in the catalogue that "graduates of the Female College receive the same degrees as graduates of the other colleges for the same course of study." A clearer statement was made in the annual report of the regents for the same year, viz., "Ladies receive the same degree as gentlemen for the same or equivalent courses of study."

In 1869 six women graduated from the College of Letters and Arts in a total class of fifteen. In 1871, although separate recitations and all other evidence of a "distinctive character" had disappeared, the "female college" name still appeared in the catalogue. In 1872–73 the action of the young women in quietly taking what they desired wherever they could best find it, a course they had consistently pursued for nearly ten years, was indorsed by the regents in dropping the separate list of women's names which was the only remaining distinctive feature of the female college.[1]

It is significant to note that an appropriation of $50,000 made in 1870 for the building of a

[1] Olin, *op. cit.*, chap. iv.

dormitory for young women was the first general appropriation ever made by the state to the university, or its first appropriation for any purpose, excepting that for interest virtually owed by the state to the university for building purposes.[1]

In view of these facts concerning the attempts to provide a special curriculum for women, it is interesting to note what opportunities were afforded them in the College of Letters and to compare this curriculum with the one offered at Vassar College.[2]

In 1868–69 candidates for admission to the Freshman class of the College of Letters of the University of Wisconsin were examined in "geography, arithmetic, and algebra to quadratic equations; in English, Latin, and Greek grammar; in Caesar, Virgil, Cicero's orations,

[1] *Ibid.*, p. 8.

[2] See p. 112. Note. A woman graduate from Wisconsin writes: "The entrance requirements for Vassar and Wisconsin were about the same in 1871. I prepared for Vassar and entered the Wisconsin modern classical course. At that time one could have entered the scientific course at Wisconsin on less rigid requirements, but so prepared could not have been admitted to Vassar at all. Now although on transferring Wisconsin students enter a corresponding class at Vassar, the reverse is not generally true owing to credits at the latter for Bible-study and art courses. In general, Vassar and similar institutions may be said either to be more stable or not to respond so much to popular demands or to develop in so many directions as such universities as Wisconsin."

and in three books of Xenophon's *Anabasis*." The course of study which led to the degree of Bachelor of Arts was as follows:

FRESHMAN CLASS

FIRST TERM

Latin	Livy—Lincoln.
Greek	Xenophon's *Anabasis*—Boise.
History	United States—Eliot.
Lectures	Laws of health and methods of study.
Elective	French.

SECOND TERM

Mathematics	Geometry, continued.
Latin	Cicero's *De Senectute* and *De Amicitia*.
Greek	Xenophon's *Memorabilia*—Robbins.
History	Greece—Smith.
Elective	French.

THIRD TERM

Mathematics	Geometry, continued.
Latin	Horace's *Odes*.
Greek	*Memorabilia*, continued.
Antiquities	Greek and Roman.
History	Rome—Liddell or Smith..
Elective	French.

Themes and declamations during the year. Latin and Greek compositions through the year.

Sophomore Year

FIRST TERM

Mathematics.....Higher algebra—Loomis.
Latin.....Horace's *Satires* and *Epistles*.
Greek.....Homer's *Iliad*.
German.....Otto's *Conversation Grammar*.
Natural History....Botany.
History.....Roman Empire—lectures.

SECOND TERM

Mathematics.....Algebra, completed—Loomis.
Conic sections.
Latin.....Histories of Tacitus—Tyler.
Greek.....Aeschylus' *Prometheus*—
Woolsey.
German.....Otto's *Conversation Grammar*.
History.....Mediaeval—*Student's France*.

THIRD TERM

Mathematics.....Plane trigonometry, mensuration, surveying, and navigation—Loomis.
Latin.....Plautus' *Captives*—Proudfit.
Greek.....Demosthenes' *Olynthiacs* and *Philippics*—Champlin.
German.....Select prose and poetry.
Natural History....Botanical analysis — Gray's *Manual*.
History.....Modern—*Student's France*.

Themes and declamations weekly during the year. Latin composition through the year.

Junior Year

FIRST TERM

Rhetoric.....Day's *Art of Discourse.*
Mathematics.....Spherical trigonometry—
Loomis.
Analytical geometry.
Chemistry.....Youman's and lectures.
Natural History....Mineralogy—Dana.
Human Anatomy..Lectures.

SECOND TERM

Physics.....Snell's Olmsted begun—lectures.
Civil Polity.....Political economy—Perry.
Chemistry.....Organic and applied.
Natural History....Zoölogy begun—Agassiz.
History.....England—Student's Hume.

Elective.....Calculus.

THIRD TERM

Physics.....Snell's Olmsted, completed, with lectures.
Civil Polity.....International law, Constitution of the United States.
Natural History....Zoölogy, completed.
General physiology.

Themes and declamations weekly during the year.

Senior Year

FIRST TERM

Astronomy.....Snell's Olmsted, and lectures.
Mental Philosophy Haven and lectures.
English Literature Shaw.
Aesthetics.....Bascom.

SECOND TERM

Rhetoric.....Bascom.
Logic.....Whately.
Moral Philosophy Hopkins, and lectures.
English Literature Lectures.
Natural History....Geology and mining.

THIRD TERM

Natural Theology Chadbourne.
Evidences.....Lectures.
History.....Guizot's *History of Civilization.*
General review.

Critical essays, declamations, and disputations weekly during the year.

In 1908–9, the entrance requirements of the University of Wisconsin were as follows:

Fourteen units[1] are required for admission, of which six are required of all, and eight are elective.

I. The following six units are required of all: English, 2 units; mathematics, 2 units; Latin, German, or French, 2 units.

II. In addition to the requirements under I, eight units must be offered from the following elective subjects: English, 1 or 2 units; mathematics, ½, 1, 1½, or 2 units; foreign languages: Greek, 1 or 2 units; Latin, 1, 2, 3, or 4 units; German, 1, 2, 3, or 4 units; French, 1, 2, 3, or 4 units; Spanish, 1 or 2 units; history: ancient history, 1 unit; mediaeval and modern history, 1 unit; mediaeval and English history, 1 unit; English history,

[1] A unit is the equivalent of five recitations a week for one year in one branch of study.

1 unit; United States history, 1 unit; civics, ½ or 1 unit; commercial law may be offered under civics, ½ unit; economics and commercial geography, combined, 1 unit; separately, ½ unit each; science, 1, 2, 3, or 4 units: botany, 1 or 2 units; chemistry 1 or 2 units; physics, 1 or 2 units; physical geography and geology, 1 or 2 units; physiology, ½ unit; zoölogy, 1 or 2 units; manual training or optional subject, 1 unit.

This enumeration shows that the range of studies recognized as giving suitable preparation for college work has greatly widened, and that the graduate of a good high school who has taken a four-year course of study is quite likely to find the path open to the university. Such limitations and obstacles as still exist are likely to be modified in the near future.

The requirements for the degree of Bachelor of Arts in the University of Wisconsin, 1908–9, were as follows:

1. GENERAL CONDITIONS

Students are expected to take 15 hours per week in recitations, lectures, and laboratory work, making 30 unit-hours[1] per year, and 120 for the course.

2. REQUIRED STUDIES

a) English, 6 unit-hours to be taken the first year of residence.

b) Language: 16 unit-hours for those who offer four years or more of language at entrance; 24 unit-hours

[1] A unit-hour is one hour of recitation or lecture per week for one semester.

for those who offer less than four years of language at entrance. The work shall be in year courses in two languages. Ordinarily the two must be chosen from the following groups: Greek (classical), Latin, French, German; but advanced work in another foreign language, to an amount not exceeding eight units, may be substituted in part fulfilment of this requirement, on certain conditions.

c) Two of the following: natural science, 10 unit-hours; mathematics, 6 unit-hours; history, 6 unit-hours.

Under natural science are included biology, chemistry, physics, and geology.

3. MAJOR STUDY AND THESIS

Major Study.—At the beginning of the Sophomore or the Junior year, every candidate for the degree of Bachelor of Arts shall select as his major subject the work of some one department in the College of Letters and Science. This department will determine the manner in which the work of the major shall be completed. The work required in the major (including thesis and required work) shall not be less than 20 hours, nor more than 40 hours; the credit for the thesis being four hours.

4. ELECTIVES

All work not included in 2 and 3 is elective, but there shall not be taken in any one department more than 40 hours, including required work in excess of 6 hours, major and electives.

5. STUDIES OF THE FRESHMAN YEAR

In this year one study only is absolutely required: English, course 1, three hours per week. All the other

studies of the year must be chosen from the following groups; at least one from each group:

Group I.—Language: Greek; Latin; German; French; Spanish.

Group II.—Mathematics: algebra; trigonometry. Science: biology; chemistry; physics; geology; astronomy. History: ancient history; English history; mediaeval history.

ELECTION OF STUDIES IN OTHER COLLEGES

Candidates for the degree of Bachelor of Arts are allowed to elect in the College of Mechanics and Engineering, the College of Law, the College of Agriculture, the course in Pharmacy, the course in Commerce, the School of Music, the course in Home Economics, or the State Library School, certain special studies to an amount not to exceed the equivalent of twenty unit-hours.

There were offered at the University of Wisconsin College of Letters and Science, during the year 1908–9, the following number of hours of instruction per week: philosophy, 32; education, 23; history, 45½; political economy, 60; political science, 43; comparative philology, 8; Greek, 43½; Latin, 37; Hebrew and Hellenistic Greek, 27½; French, 42; Italian, 6; Spanish, 13½; Scandinavian languages, 24; German, 61; English, 48½; journalism, 7; comparative literature, 2; public speaking, 16; mathematics, 27½; chemistry, 50½; physics, 15; astronomy, 6½; geology, 43; meteorology, 3; zoölogy, 20; botany, 27; anatomy, 17; physiology, 6; bacteriology and hygiene, 14; pharmacology and pharmacy, 9½; music, 23.

These included courses for undergraduates in the following subjects:

PHILOSOPHY: psychology; logic; introduction to philosophy; philosophic thought of the nineteenth century; philosophy of religion; relation of man to nature; history of ancient and mediaeval philosophy; history of modern philosophy; ethics; social and political ethics; aesthetics; advanced analytic psychology; experimental psychology; research in psychology; comparative psychology; abnormal psychology; psychology of language; psychological principles; British philosophers of the eighteenth century; Kant; history of morality; contemporary moralists.

EDUCATION: history of education; history of education in the nineteenth century; administration and supervision of education; comparative educational administration; mental development; principles of education; contemporary educational movements; educational classics; seminar in administration and supervision of education; supervision of instruction; educational psychology; research in education; seminar in educational psychology; advanced educational psychology; experimental education.

HISTORY: ancient history; mediaeval history; English history; modern European history; history of the United States; Greek civilization and its expansion; later Roman Empire; mediaeval civilization; the Crusades; constitutional history of England; the later Middle Ages; Renaissance in Italy; introductory seminar in European history; constitutional history of England; Europe and America; British Empire since 1815; development of modern Russia; the old régime; French Revolution and Napoleonic Empire; social, economic, and

institutional history of the American colonies; American Revolution; history of the West to 1840; diplomatic history of the United States; materials of American history; introductory seminar in American history; teaching of history.

POLITICAL ECONOMY: elements of economics; elementary sociology; elements of public finance; elements of money and banking; introduction to anthropology; economic geography; economic geography of the United States; elements of accounting; theory and practice of accounting; advanced accounting and auditing; business organization and management; commercial law; races of the five continents; industrial evolution and its problems; history of economic thought; modern socialism; labor problems; labor legislation; problems in taxation; exploitation of natural resources; agricultural economics; historical and comparative agriculture; research course in agricultural economics; manufacturing industries; elements of statistics; economic statistics; social statistics; financial history of the United States; money market; transportation and communication; special problems in transportation; corporation economics; corporation finance; speculation and investment; insurance economics; social psychology; general sociology; charities and corrections; public utilities; American labor history; advanced economics; early development of man.

POLITICAL SCIENCE: government and politics in the United States; European governments; general political science; elementary law; elements of administration; administrative problems; Constitution of the United States; history of continental European law; Roman law; history of English and American law; jurisprudence;

English and American constitutional law; cases in constitutional law; municipal government; state administration; federal administration; international law; contemporary international politics; oriental politics and civilization; colonial politics; party government; consular service; law of the press; theory and practice of legislation; comparative study of constitution-making; administration of punitive justice; Latin-American political institutions; current political topics; practical bill-drafting; public utilities.

COMPARATIVE PHILOLOGY: comparative philology; elementary Sanskrit; advanced Sanskrit; pre-Germanic grammar; Russian.

GREEK: elementary Greek; prose composition and sight-reading; Demosthenes; Euripides; Herodotus; prose composition; easy Greek for sight-reading; Greek lyric poets; Thucydides; Greek dramatic poets; Greek orators; Plato's *Republic*; advanced Greek composition; modern Greek; life of the Greeks and Romans; Greek literature in English translation; classical archaeology.

LATIN: Cicero and Virgil; Livy; Cicero and Terence; prose composition; Horace; advanced prose composition; Catullus, Ovid, Pliny, and Martial; Cicero's Letters and Orations; Plautus, Terence, and Seneca; Lucretius; Virgil; literary criticism; oratory and philosophy; Ovid; teaching of Latin; Latin literature; Roman satire; Roman historians; literature of the late Empire; Roman archaeology.

HEBREW AND HELLENISTIC GREEK: elementary Hebrew; Hebrew historical literature; Hebrew legal literature; Hebrew prose composition; elements of Hellenistic Greek; Matthew and Mark; Luke and the Acts; Hebrew history; historical geography of Palestine;

minor prophets; Book of Job; Hebrew syntax; Book of John; Psalms.

FRENCH: elementary French; second-year French; French composition; French conversation; rapid sight-reading; Romance countries; advanced reading; survey of French literature; French literature; nineteenth-century French lyric poetry; French novel; prose writers of the seventeenth century; classic drama; Molière; literary movements in the eighteenth century; modern drama; advanced composition; advanced conversation; teaching of French; French pronunciation.

ITALIAN: elementary; Italian literature.

SPANISH: elementary; nineteenth-century Spanish; Spanish literature; conversation; commercial correspondence; fourth year in commerce; conversation and composition.

SCANDINAVIAN LANGUAGES: modern Norse; Kielland; Ibsen; history of Dano-Norwegian literature; Swedish literature; Norse mythology; Scandinavian literature; modern Scandinavian authors; dramas of Ibsen; old Norse; modern Norse; Norwegian literature; Norwegian poetry; Norwegian dialect writers.

GERMAN: elementary German; dramatic reading; critical German prose; composition and conversation; sight-reading, writing, and speaking German; grammar; teaching of German; classical and modern writers; modern German dramatists; modern German novelists; German poetry: Heine; Hebbel; Goethe; Lessing, introductory; Lessing, Goethe, and Schiller; nineteenth-century drama; Goethe's *Faust;* history of German literature; Lessing; lyric poetry; novel of the nineteenth century; popular German literature; Shakspere in Germany.

ENGLISH: English composition; technical writing;

advanced composition; Anglo-Saxon; Middle English; survey of English literature; romantic movement; Victorian Era; the drama; Shakspere; modern drama; epic poetry; lyric poetry; novel; American literature; teaching of English; Chaucer; versification; Tennyson; Browning; the ballad; literary criticism; movements in American literature; classical translations.

JOURNALISM: newspaper writing; reporting; editing; editorial writing; magazine work.

COMPARATIVE LITERATURE: ancient classical drama; modern classical drama.

PUBLIC SPEAKING: composition of public addresses; argumentative themes; oratorical delivery; public speaking; debating; *extempore* speaking; principles and practice; interpretative reading; dramatic seminar.

MATHEMATICS: algebra; trigonometry; elementary analytic geometry; elementary calculus; determinants; analytic geometry; commercial algebra; advanced calculus; differential equations; theoretical mechanics; projective geometry; modern methods in analytic geometry; differential geometry; theory of probabilities; analytic functions; teaching of mathematics.

CHEMISTRY: general chemistry; teaching of chemistry; inorganic chemistry; quantitative analysis; alkaloid assay; organic chemistry; advanced organic chemistry; plant chemistry; assaying; history of chemistry; gas analysis; water analysis; electro-chemical analysis; industrial analysis; chemical preparations; proximate organic analysis; preparation of organic compounds; seminar in organic chemistry; chemistry of alkaloids; chemistry of the volatile oils; physical chemistry; electrochemistry; thermal chemistry; chemistry of food.

PHYSICS: general physics; heat and light; electricity

and magnetism; teaching of physics; temperature measurement; mathematical physics; modern optical instruments.

ASTRONOMY: general astronomy; spherical astronomy; practical astronomy; orbital motion.

GEOLOGY: general geology; applied geology; physiography and geography; physical geography; regional geography; general mineralogy; short course in mineralogy; short course in petrology; petrology; advanced physiography; teaching of physical geography; historical geology; structural geology; metamorphism; metamorphic rocks; Lake Superior geology; Lake Superior rocks; advanced mineralogy; paleontology.

METEOROLOGY: meteorology; climatology.

GENERAL BIOLOGY.

ZOÖLOGY: invertebrate zoölogy; vertebrate zoölogy; organic evolution; variation and heredity; evolution problems; entomology; animal parasites; elementary entomology; bionomics; morphogenesis; teaching of zoölogy; ornithology.

BOTANY: morphology; physiology of the seed plants; cytology; mycology; plant pathology; diseases of trees; bryology; dendrology; botanical methods; hybridization; heredity; phycology; plant reactions; cultivated plants; seed plants; microscopical examination of drugs and food products.

ANATOMY: teacher's course; comparative anatomy of vertebrates; comparative anatomy; histology and organology; vertebrate embryology; human anatomy; topographical anatomy; neurology.

PHYSIOLOGY AND PHYSIOLOGICAL CHEMISTRY: elements of human anatomy and physiology; physiological chemistry; physiology.

BACTERIOLOGY AND HYGIENE: general bacteriology; communicable diseases; general hygiene; medical bacteriology; biology and chemistry of water supplies; industrial bacteriology; immunity; laboratory course in immunity; pathogenic protozoa; agricultural bacteriology; dairy bacteriology.

PHARMACOLOGY AND TOXICOLOGY: toxicology; pharmacology; laboratory technique; pharmaceutical technology; prescription practice; economic function of the state; history of pharmacy.

MUSIC: theory; harmony; counterpoint; history; composition playing; appreciation; education; masterpieces; choral.

COURSE IN GENERAL HYGIENE AT THE UNIVERSITY OF WISCONSIN

The prevention of disease among students in the university is the prime aim of the new course of study on general hygiene which has just been announced for the second semester, beginning February 23. The relation of the mind to health, the care of the nervous system, infectious diseases and antitoxins, the effects of drugs, alcohol, and tobacco, food supplies and their adulteration, exercise and health, water and milk supply, and a series of similar subjects are to be discussed for the benefit of the students in weekly lectures by members of the faculty from the College of Medicine, Department of Bacteriology, Physical Training Department, and Chemistry Department. Professor William Thompson Sedgwick, of the Massachusetts Institute of Technology, will give two lectures in this course on air supply and ventilation and on water supply and water purification.—*University Bulletin*, February, 1909.

New Courses in Home Economics at the University of Wisconsin

A recent University of Wisconsin bulletin announced (June, 1909) that the courses to be given during the next college year in the reorganized Department of Home Economics of the College of Agriculture of the university would include three distinct lines of work adapted to different classes of students, as follows:

1. A four-year general course with special reference to preparation for home-making, leading to the degree of Bachelor of Science.

2. A general course in home economics, including supplementary work in pedagogy, which will prepare students for teaching domestic science in grade and high schools.

3. A general survey course in home economics for those desiring only a general knowledge of this subject, which may be pursued by students in the College of Letters and Science who are candidates for the degree of Bachelor of Arts.

For advanced students, a teachers' course will take up more advanced problems, and an opportunity for special investigation in home economics will be offered.

In December, 1909, the regents voted to bestow the degree of Bachelor of Science in the home economics course.

CHAPTER XIV

EDUCATIONAL PROGRESS

The preceding chapters have presented definite outlines of the curriculum at two different periods in the three stages of education, the elementary, the secondary, and the collegiate. It may be seen very clearly that even so short a time ago as half a century the aim of the elementary school was limited by the notion of the value of book knowledge. Reading, writing, and ciphering, English grammar and a little geography and history were the means of approach through the schools to life. The development of the curriculum during the succeeding years shows a much clearer conception of the function of the school in preparing the child for life. The special aims of public-school education as they are beginning to manifest themselves follow a few general lines:[1]

1. A development of the sense of citizenship.
2. A knowledge of the conditions which prevail in modern life and power to share in them.

[1] The reader is referred to an admirable presentation of the aims of elementary and secondary education in *Educational Aims and Educational Values*, by P. H. Hanus.

3. Provision for the welfare of individual boys and girls, rather than the inviolability of the curriculum.

4. Recognition of the fact that domestic duties or industrial activities await a large majority of the girls.

5. The imperative necessity of reaching the children whose wants the older curriculum did not satisfy.

6. Appreciation of the value of interest as paramount to that of subject-matter in determining the importance of a subject.

7. The promotion of normal physical development.

Many differences between the curriculum of 1861 and that of 1909 may be traced to a recognition of these principles, and there are constantly increasing evidences that educators are devising ways and means of breaking away from the methods determined by former social and industrial conditions and of making the school, both elementary and secondary, a medium for the effective training of boys and girls for the life they are actually to lead.

A few illustrations may be given in addition to those furnished by the curricula of the Boston and Chicago schools to show how these principles are being put into effect. It is not

too much to hope that within a few years the school-attendance statistics of the United States will show concrete and desirable results from the new view of the place of the educational system in a democracy.

In Chicago, beginning with January 1, 1910, algebra was removed from the eighth grade, and a course devoted to the life of the city, with local application of history, civics, and sociology, was introduced. As outlined, the course is made up as follows, with emphasis placed on the duties of good citizens in relation to the city:

HISTORY: explorations and settlements of the French in the old Northwest; George Rogers Clark's expedition; ordinance of 1787 creating the Northwest Territory; Fort Dearborn and the War of 1812; Illinois as a state, its part in the Mexican and Civil Wars; the World's Fair.

GEOGRAPHY: advantages of Chicago's location; resources of Illinois and the Northwest; waterways; railroad developments.

INDUSTRIES: the stockyards; rolling-mills; agricultural-implement manufacturing; machinery; electrical supplies; furniture; books; musical instruments; boots, shoes, and clothing; industries in the neighborhood of each school.

SOCIAL ACTIVITIES: educational institutions; philanthropic enterprises; social settlements; hospitals; churches.

MUNICIPAL AND CIVIC AFFAIRS: city government;

the city hall; fire department; police department; health department; county government; state government; park systems; water supply; sewers; care of streets; transportation in the city; gas lighting; electric lighting; tunnels and subways; plans for the improvement of Chicago.

Plans have been formed in the Farragut School of Chicago to give help to boys and girls who wish better to prepare themselves for work. Half-time classes for boys are planned to permit boys to work part time and to attend school part time. Several of the superintendents of large factories near the school have promised to take the boys who attend these classes and to pay them for the time they work in their shops. The boys will work in pairs. One will attend school for two weeks, while the other works in the shop. On Saturday of the second week the boy who has been in school will go to the shop and learn what his companion has been doing. At the end of the second week the boys change places, and will continue to change every two weeks during the course.

The course will take two or more years. Shop-work will consist in handling stock, learning the use of tools and the operation of machines, and such other work as pertains to the shop where the boy is employed. The school course

will be planned to help the students to learn more quickly and to know better the work of the shop. It will consist of: shopwork; mechanical drawing; freehand drawing; workshop mathematics; English; history of industry; current events; civics.

Students desiring to enter such classes must be at least sixteen years of age, except that by special arrangement a few may be taken between fourteen and sixteen years of age. They must be of good character and have sufficient general education and intelligence to carry on successfully the line of work offered in both shop and school. The classes do not promise to turn out journeymen. The number of positions in the shop is limited. The boys selected will be those best fitted to carry on the course.

Continuous trade classes for girls will be planned to give a large amount of handwork. This work will be practical and will be of direct value to the pupil, even if she can remain in school for only one year. The course will be planned for one or two years and will include the following: beginning sewing by hand and machine, undergarments, children's clothing, drafting and cutting patterns; advanced sewing, planning, drafting, cutting and making of simple dresses; textiles, a study of the materials

used in sewing; food study, including the study of food material, composition, uses, source, methods of manufacture; cooking, practical work, including serving; home nursing and invalid cooking; sanitation and hygiene, proper care of health in the home; freehand drawing and design; history of industry; arithmetic; English; gymnasium. Students taking this course must be at least thirteen years of age and must have some aptitude for handwork.

The following facts show the status of the domestic arts and sciences in the Chicago Public Schools in December, 1909.

Number of schools equipped for domestic science	75
Number of schools availing themselves of these facilities	130
Number of schools where domestic arts are taught	145
Number of high schools in above lists	11
Number of pupils in domestic science— High schools, 907; Elementary schools, 8,605	9,512
Number of pupils in domestic arts— High schools, 833; Elementary schools, 9,490	10,323
Number of pupils in both phases	19,835
Number of teachers of domestic science	37
Number of teachers of domestic arts	37

There is a vast amount of sewing taught as construction work in the lower grades by the grade teacher, but the above statement takes cognizance only of the grades where the subjects are required and taught by trained teachers.

All girls in the elementary schools have either domestic science or domestic arts as a requirement for graduation.

In the high schools both subjects are elective.

The following description of the recently established industrial and technical schools in Cleveland is a good illustration of the new method of meeting existing difficulties:

The board of education of Cleveland, Ohio, has authorized the establishment of an elementary industrial school for boys and girls who are more than thirteen years old and not below the sixth grade. The course extends through two years and consists of two types of work, namely, (*a*) academic, (*b*) industrial, the time being equally divided between the two. The academic studies comprise English, arithmetic, and geography-history. The English includes spelling, writing, reading, literature, composition; the arithmetic includes accounts and shop problems; the geography-history deals with the industrial, commercial, and political phases of the subject, and will include civics and municipal studies.

On the industrial side the work will include, for boys, bench work in wood and sheet metal, freehand drawing and design, mechanical drawing; for girls, sewing and garment-making, cooking and household arts, freehand

drawing, design, and construction. Throughout, the work will be intensely practical.

The day consists of nine periods, one of which is devoted to luncheon. The school accommodates 80 boys and 80 girls. It is intended for boys and girls for whom the regular course is unduly literary and who are not interested in bookish things. It is also of interest to those whose economic condition requires them to leave school early to become wage-earners.

An auditorium, gymnasium, shower bath, and swimming-pool are available for the use of this special school. It is open to available pupils from all parts of the city. Each school building may name boys and girls, naming a first choice and an alternate. If possible, when a delegate named is a boy, or boys, the alternate should be a girl, or girls, and when the delegates are girls the alternates should be boys.[1]

The Cleveland Technical High School is organized on a plan somewhat different from that which prevails in other schools of its class in this country. As stated by Mr. Elson, superintendent of schools:

The boys and girls are in separate classes, with separate study halls. This arrangement exists, not for reasons of sex, but because of the widely different kind of work. The academic work in this school is related very closely to the technical or shopwork, so that the chemistry which the girls have, being chiefly applied chemistry, is different from that taken by the boys. The same is true of physics, English, mathematics, etc.

[1] *Report of the U. S. Commissioner of Education*, 1909, Vol. I p. 164.

Practically, it will be seen that a school for boys and a school for girls are conducted in the same building under one direction. The prospectus issued by the institution states:

The department for girls will have domestic science and domestic and industrial art for its basis, and around these studies the rest of their work will be grouped. Home-making courses are of greatest value to girls, and to train in this direction will be the aim of these departments. Cooking will be very practical and comprehensive, covering preparation and analysis of foods, the study of food values, and the preparation and serving of complete meals. This will be supplemented by courses in home-planning and house decoration, taking up the study and arrangement of rooms, wall and floor coverings, study of furniture and pictures, draperies, etc. This will be organized with particular reference to economy and good taste. Segregated classes for the study of physiology and personal hygiene will give students an opportunity to acquire a knowledge of those things which are so essential to their future health and happiness.

This instruction will be supplemented by a complete course in home nursing, including first aid to the injured, the care of invalids, and particularly of children. Instruction in our high schools has never been specific enough along these lines and to the point, to the end that when a girl has forced upon her the care of the home and the family she will be thoroughly prepared for functions of this sort. Keeping household accounts, economic home management, marketing, etc., will receive due consideration.

Similar opportunities for specialization during the

last two years of the course will be offered girls as are provided for boys. In most classes the nature of studies and method of teaching demand a separation of boys from girls.[1]

In 1908 the Board of Education of New York City adopted a report of a special committee on trade schools which provided that fifteen rooms be set aside in one of the Brooklyn schools as a vocational school for girls between fourteen and sixteen years of age, and that a standing committee of the board be organized to have charge of all matters relating to vocational training, not only in the special schools devoted to that purpose, but also to the vocational courses in the day schools and the evening trade schools.[2]

The following suggestions for industrial schools for girls in connection with the Boston of 1915 have been made:

(1) An ample building set apart for the industrial training of girls open every day and evening through the year; (2) wise directors who shall learn the present needs of the girls as indicated by their homes, who shall approve the selection of the groups to undertake this study (in every case with the consent of the parents) and who shall outline the work to be done; (3) half-time classes in the daytime—that is, all girls who occupy the

[1] *Ibid.*, p. 180.

[2] *Ibid.*, 1908, p. 89.

industrial school in the mornings shall have "regular" schoolwork in the afternoon and vice versa; in this way the new school will articulate with the old and the work of each will be more intensive and more effective; (4) provision for continuation schools in the evening where older girls and women may be taught; (5) co-operative apprenticeship, by means of which the girls may work half the day in stores or shops and study the other half the day in schools; (6) house-keeping centers, where the general principles and practices which are taught in the school may be applied under the normal conditions of the home.

These industrial centers will have two functions: (1) to develop facility and industrial ability—working capacity—the tendency to use the head and hand together; (2) to provide trade instruction in specific industries, in any one of which the girls might profitably engage.

They need not modify the curriculum of the regular school for all children, but they should bring about extensive modifications in the academic provision for the girls who attend these centers.[1]

The playground movement is rapidly gaining ground; it is based on the following principles:

1. Playgrounds to be effective must have supervisors, directors, and teachers who have had such training that they understand the child and can direct his activities so as to bring about the best results mentally, morally, physically, and socially.

2. Play, being the chief activity of children during infancy, contains the beginnings of all subsequent devel-

[1] Address by Dean Arnold of Simmons College.

opment and culture. Its function is educative, and its forms are derived from hereditary adaptations and co-ordinations pleasurable to us from their usefulness in the distant past of the race. We consider the chief purposes of the playground to be: (*a*) the promotion of robust health through the encouragement of a free and enjoyable life in the open air; (*b*) the development of nervous co-ordinations and the normal functions, especially of the vital organs, through the vigorous activity of play; (*c*) the arousing of deeper interests, emotions, and enthusiasms through those activities by which the central nervous system was developed in the past of the race and to which alone it responds with full effectiveness; thus determining the energy of nervous discharge and consequent vigor of all after-life; (*d*) the training in courtesy and good fellowship through those social relations of play in which friendships are chiefly formed; (*e*) the establishment of a moral trend to life through the cultivation of right habits and those loyalities on which social morality and good citizenship chiefly depend; (*f*) the cultivation of a sense of the joy of life, by which the soul is harmonized and unified and a play spirit for life's work is acquired.[1]

The following facts presented by the Playground Association of America are significant:

Approximately 275 cities have now established playgrounds. Previous to 1908 only 90 cities had playgrounds.

[1] "Report of the Committee on a Normal Course of Play," *Proceedings of the Third Annual Congress of the Playground Association of America*, p. 92.

In 201 cities there are 1,024 playgrounds.

In 1908 Massachusetts enacted a law providing in effect that the cities of the state with a population of 10,000 or more should vote whether or not to establish playgrounds. All but two cities voted to have playgrounds supported by public taxes.

Chicago, New York, Boston, Los Angeles, Baltimore, St. Louis, Dayton, Pittsburg, Rochester, and other cities have now arranged for play leadership the year round—winters as well as summers.

During the past ten years Chicago has expended $11,000,000 and New York about $16,000,000 in establishing playgrounds.

Ten cities alone spent over $800,000 last year for maintenance of playgrounds.

Public-spirited men and women in Cincinnati, Ohio; Springfield, Mass.; North Andover, Mass.; Carlisle, Pa.; Jersey City, N. J.; Sag Harbor, N. Y., and in other places have donated playgrounds to their native city or town.

New York, Philadelphia, St. Louis, and other municipalities are creating playground and recreation commissions.

The character of the people leading children in their play is now emphasized more strongly than material equipment.

PROPERTY OF MARION D. HELLER

On the physical and hygienic side there are several provisions. Visiting nurses, school baths, and school lunches are adjuncts to the school system proper which are increasing as their value is recognized.

Through its inquiries of 358 cities in forty-two states and the District of Columbia the bureau of municipal research of New York City discovered that of all these cities with a total population of 22,000,000, 148 cities with 700,000 school children were making an attempt to discover transmissible diseases at school; 210 were inspecting such diseases; 227 were examining for defective vision; 171 for breathing troubles, and 117 for bad teeth. Ninety-eight cities seek out and give special instruction to children found predisposed or already infected with tuberculosis. In 56 cities nurses take children to dispensaries or instruct parents at schoolhouses; 43 cities send nurses from house to house; 98 send out to parents cards of instruction about tuberculosis, dental hygiene, and diet, while 147 cities have arranged special co-operation with dispensaries, hospitals, and relief societies. Three years ago adenoid growths were almost unheard of among school-teachers; today in 171 cities, adenoids, hypertrophied tonsils, breathing defects are seen to be a more

serious matter to child welfare and school progress than the contagious diseases of which people are more afraid.

Special provision is made in many places for backward children so that their progress shall not be won at the cost of normal children and their welfare shall not be unduly subordinated to that of normal children.

Superintendent William H. Maxwell of the New York City public schools has introduced in the vacation schools of that city summer classes for backward children. Such classes are organized in all the buildings where vacation schools are maintained, for the benefit of pupils who failed of promotion at the close of the spring term. Teachers are urged to enlist the interest of children who need the instruction contemplated. The increased influx in recent years of immigrants from southern Europe has been followed by a correspondingly increased need of adjustment of the school system to the school children. It is to meet this need as far as possible that schools are maintained in vacation time for children who need special instruction.

The city of Providence, R. I., opened February 1, 1908, a fresh-air school for weak and anaemic children. The building faces south and has light on three sides. Along the lower

south side of the room large swinging windows have been cut in the wall. In winter the children do not remove their outer clothing, but keep on their wraps and sit in what are known as "sitting-out bags." The chairs and desks are adjustable and are placed on movable platforms, so that they may be moved about from place to place. The rooms are heated by the sun and ordinary stoves. Nourishing soups are provided as often as needed.

Since 1906 provision has been made in the public schools of New York City for the education of crippled children. In 1907 classes for them were added to the regular public schools wherever rooms were available, and there are now 18 such classes composed of children from nine to fifteen years of age coming at 9 A. M., bringing a lunch, and remaining until 2 P. M. The regularity of attendance is often 100 per cent. The expense of the stage for their transportation is borne by the Board of Education.[1]

An act of the legislature of Massachusetts approved March 6, 1908, requires that instruction as to tuberculosis and its prevention shall be given in the public schools of the several cities and towns.

Open-air schools for tuberculous children

[1] *Report of U. S. Commissioner of Education*, 1909, p. 511.

have been established in eight different cities, and it is thought that every city should have at least one such school or well-equipped classroom for every 25,000 of its population.

Defective children receive special care at the hands of the state or through private agencies. In 1908 there were 40 state schools for the blind, with 4,340 pupils, and 55 state schools for the deaf, with 10,042 pupils. There were also for the deaf 51 public day schools, with 1,194 pupils, and 16 private schools, with 543 pupils. The 25 state schools for the feeble-minded had 17,225 pupils, and the 16 private schools, 875 pupils.

A department of school hygiene has been established in Boston, Mass.[1] The organization provides for a director of school hygiene; three assistant directors; as many special instructors in physical training, special assistant instructors in physical training, instructors of athletics, supervisors of playgrounds, playground teachers, heads of playgrounds, helpers in playgrounds, and helpers in sand gardens, as the board may from time to time authorize; a supervising nurse and assistant nurses; an instructor of military drill; and a medical inspector of special classes. The Board of

[1] *Ibid.*, 1908, p. 94.

Education has appropriated $58,000 for playgrounds.

On May 27, 1907, the Boston school committee adopted rules and regulations providing for a supervising nurse and for assistant nurses "to assist the medical inspectors assigned to the public schools, to see that the directions given by the inspectors are carried out, and to give such instruction to the pupils as will promote their physical welfare." The committee appropriated $10,000 to meet the expenses of the services of female nurses and provided that the salary of the supervising nurse should be $924 for the first year, with an annual increase of $48 until the maximum of $1,116 is reached. The salaries of assistant nurses were fixed at $648 for the first year, with an annual increase of $48 until the maximum of $840 is reached. On September 9, 1907, the committee approved the appointment of a supervising nurse and twenty assistant nurses. Such, in brief, are some of the more important provisions which have been made for the physical well-being of school children.

There have been of late many expressions of dissatisfaction with the influences of the college on the secondary school. It has been said, for example, that "the college is the main hindrance to the vital pedagogical treatment of the second-

ary period."[1] The same discontent is voiced in the prophecy:

> When the college grants to the high school the right to make its own course of study, when it recognizes for entrance any subject well taught, when it admits that the welfare of the boys and girls is more important than special preparation for its advanced courses, when it places the needs of the ninety whom it never reaches above the crotchets of the professor who wants to make specialists of the ten, then it will enable the high school to fulfil its mission of equal opportunity to all."[2]

An examination of the requirements for admission to different colleges and a comparison of them with the curricula of high schools in different localities would show that where the public supports separate college-preparatory schools with a limited curriculum, or in large cities like Chicago where it is possible to maintain a greatly diversified curriculum in the same school, the needs of the great majority, over 90 per cent., who do not go to college are not greatly sacrificed. On the other hand, in smaller and less rich communities the pressure on the curriculum from the college above, while doubtless intended to provide high standards of scholarship, often involves the necessity of providing a very narrow and specialized course

[1] Abraham Flexner, *The American College*, p. 22, and chap. iii.

[2] W. D. Lewis in *The Outlook*, December 11, 1909, p. 825.

of study, and thus it becomes impossible to meet adequately the needs of students who do not intend to go to college. These conditions undoubtedly account in large measure for the failure of the secondary school to attract students in larger numbers and to hold them through the course.

There are indications that the relations between the college and the high school are undergoing serious modifications, and there are many who believe that the college may actually gain through losing its dominating influence and being obliged in turn to recognize some of the forces which are revivifying the secondary schools.

In view of the conditions which exist in the public schools it is interesting to note that a committee of the National Education Association recommended in July, 1909, a complete and radical reorganization of the public-school system. The report of the committee closed with the following statements:

The committee is of the opinion that while we may not expect or hope for any sudden or extensive change in the general scheme of organization from the eight- and four-year division to the six and six division, nevertheless we feel certain not only that the change is inevitable, but that it is already in progress and is taking place

in different ways to meet local conditions. We further believe that the reorganization of the public-school system along the lines of this discussion is of fundamental importance, and that every reasonable measure that can be taken to overcome the inertia of the established system and to make for an organization more in consonance with advanced educational opinions and with the needs of modern society should be employed. The problem involves not only division by years, but a well-digested curriculum of both the elementary and secondary branches. This curriculum should (*a*) provide the content of the work, including vocational studies; (*b*) establish the points of differentiation; (*c*) consider methods of teaching and plans for promotion of pupils.

The changes in collegiate conditions may be briefly outlined. They are distinctly more marked in the case of the state university than in that of the woman's college. The resemblance between the curricula at the early stage would be curious if it were not for the fact already stated that the system of education of women was modeled upon that "already outgrown" of men (see p. 111).

A comparison of the later curricula, together with entrance requirements and choice of studies allowed, shows that the woman's college is still held to some degree in the trammels of the old traditions and has not adjusted itself to modern conditions to the same extent as has

the state university which is still conducted primarily in the interests of men. This is shown by the rigidity of the entrance requirements, the woman's college allowing a choice among ten subjects and the state university among twenty subjects.

The following table showing the distribution of instruction in the principal groups of departments is also of interest:

	Vassar College		University of Wisconsin	
	No. of Hours	Percentage of Total	No. of Hours	Percentage of Total
Total	376½		801½	
Foreign languages	125	33½	262½	33
Historical sciences	48½	13	148½	18
Physical sciences	69½	18	127½	16
Biological sciences	16	4	84	10
Philosophy and education	21	5	55	7

It is to be noted that whereas the same proportion of instruction is offered in foreign languages at both institutions, at the woman's college the languages are Greek, Latin, French, Italian, Spanish, and German, while there are offered in addition at the state university Hebrew, Arabic, Assyrian, Aramaic, Syriac, Norwegian, Swedish, Danish, and Slavic and Celtic languages. If only the same foreign languages are counted, the proportion at the

university would be 25 per cent. Of course it must be remembered that one institution is a college and the other a university, but it is also true that these other languages are accepted for the Bachelor's degree.

A more significant proof of the slighter change in adjustment of the woman's college is that the instruction in all the biological sciences, including hygiene, is but 4 per cent. of the whole, and there is no domestic economy "practically taught," and very little theoretically taught, although both hygiene and domestic economy were emphasized as of importance by the founder.

Women who went to college in the early days remember how much emphasis was placed on the importance of justifying their course by passing successfully the intellectual tests set for men—the only recognized tests. They met this responsibility with almost superhuman conscientiousness, and even after their intellectual fitness was abundantly proved they still felt themselves bound in a kind of intellectual slavery. College authorities have not seen the folly of this attitude, or at least they have done almost nothing to change it. While the intellectual life of men has become greatly varied, the intellectual life of women continues

to be patterned after the same mold, and their leaders are timorous about making a change. It is chiefly as women follow in the newer intellectual paths laid out for men that they are finding new opportunities for the adjustment of their intellectual life. It would seem as if their intellectual record were now so secure as to justify and even demand greater independence in choosing their methods of training and expression.

The succeeding chapters will be devoted to a consideration of certain aspects of collegiate education which are of special importance if the years spent in college are to be justified as a means of making women qualified as leaders in the social, civic, and domestic life of the world as well as in scholarly pursuits.

PART III

THE COLLEGIATE EDUCATION OF WOMEN

CHAPTER XV

THE ELECTIVE SYSTEM

So long as the college was the stepping-stone chiefly to the ministry or to the law, the curriculum remained fixed and the scholastic methods which were fitted to this end remained unchanged. With the broadening of the function of the college and the recognition of the value of mental discipline and cultivation to be secured through newer methods and wider knowledge, the rigidity of mediaevalism was gradually forced to give way, and the benefits of higher scholarship were shown to be the right of a larger class of young people.

One of the effects of this extension of the work of the college has been the changes which have occurred in the curricula of all such institutions. These changes have been based on one or the other of the following educational theories. On the one hand, it is held that all subjects of human knowledge, if equally well taught, are of equal value as instruments for human discipline and culture; and on the other, that certain subjects of human knowledge are fundamental and essential not only to all general cul-

ture, but to the understanding of other subjects. There are naturally wide variations in the application of the second theory. The proportion of required to elective studies may vary from one-twelfth to eleven-twelfths of the whole course of study. Just so far as the required curriculum represents the progressive judgment of the faculty as to what is basic in collegiate training, there is no responsibility on the part of the student; but with the widening of the scope and amount of elective work, there comes an opportunity and an obligation for both the student and the college, whose full significance is unfortunately too frequently missed by one or the other if not by both.

A study of the motives and influences which lead students in choosing their courses where the elective system prevails will bring into clearer light the present needs on the academic side.

These motives and influences are by no means as few or as simple as is often assumed. However it may have been a generation ago, few young people today, either boys or girls, enter college with a clearly defined purpose or plan to guide them in their studies. Even of these few there are always some who, under the influence of a broader outlook or wider experience

and knowledge, change their decision after entering college.

When a young woman is brought face to face with the problem of choosing her studies, there are certain influences at work which consciously or unconsciously guide her in her choice, even independently of any help which the college, through its appointed officer, or its curriculum regulations, may give her. Her expression of the reason for her choice may be naïvely frank: "I am going on with Latin, because I always stood well in it at high school;" "French always came easy, so I think I will keep it up;" "I am going to specialize in English because my writing has always been praised and I have had a story published and was our class poet in high school;" "I always thought I should like psychology, it sounds so interesting;" such are some forms of expression of the individual attitude.

Sometimes the advice or request of a parent or teacher is followed as final: "My father thinks that I should take mathematics, I am so careless;" "My mother thinks chemistry would be useful to me at home;" "My father liked philosophy at college and wants me to take it;" "My teacher thinks I ought to keep up my Greek all through college;" in these

and other ways the young student shows that she has had help and counsel in making out her course of study.

The preparatory training sometimes determines to a considerable extent the studies which may be taken later. A subject such as Greek may not be offered in the high school. Instruction, notably in the sciences, may be so defective as to furnish the young student with no proper preliminary training, and a large range of studies may be a closed book to her. On the other hand, subjects which have been well taught in the high school often make the only foundation on which to build, and they are in many cases the only subjects of which the student thinks in planning her future work.

There are a few students who wish to prepare themselves for bread-winning in some definite pursuit such as medicine, journalism, or librarianship. In the cases where the students have only this goal in view there is the temptation to take a short cut to technical training. Under the pressure of pecuniary need higher ideals of scholarship and efficiency may be sacrificed. Women are resisting this temptation quite as vigorously, to say the least, as men.

There are unquestionably many college women who are looking forward to teaching

as a profession, but they are not so numerous as is popularly supposed, and their proportion is steadily growing less. It is natural that they should study subjects which they expect to teach. In this choice they are frequently led by aptitude for a study; but it more often happens that they select a subject, such as history or English, for which they do not particularly care, because there are more positions open to them. A subject such as physics or zoölogy may be set aside, although the student is eager to pursue it, because her principal or superintendent tells her that "there is almost no chance for a woman to get a position to teach in that line of work."

There is, moreover, a large and increasing number of girls who, while not definitely expecting to teach, feel the spirit of the age, and led by the counsel of prudent fathers or of mothers made wise by bitter experience, undertake to fit themselves by some special line of study "to support themselves in case they should have to." The fact that if the emergency should arise, it might not come until their stock in trade of method and fact is too antiquated to be of avail does not lessen the value which such an impetus lends to the process of training. At the present time, teaching seems to be the easiest

and most natural means of self-support to which a young woman can look forward and for which she can prepare herself; and this will probably be the case for many years to come, or until teaching in secondary schools becomes a learned profession, drawing to it men of the best caliber in at least equal proportions with women.

Certain influences which cannot be easily put into words or exactly formulated are known in every college to have weight in guiding students in their choice. The popularity of an instructor, due to strong personality or to catchy cleverness, is a factor which must be reckoned with in estimating the real significance of statistics showing the choice of studies. For example, a strong personality may explain a very general choice of fine arts in one institution, or the loss of a great teacher account for a decline in the number of students taking political economy in another. It is well known in every college community that the popularity of an instructor is a very uncertain quantity, fluctuating seemingly without reason. "A girl from my school told me to be sure to take Mr. X," and "I want to wait until I can have Mr. Y," are phrases expressing a desire which may be a proper basis for the choice of a course, for a teacher may be greater than the greatest subject.

Every faculty knows, too, how subjects have waves of popularity which sometimes are beyond explanation. One year students rush to a subject like psychology, for example, and the next year there may be a reaction and the classes in that subject will be comparatively small.

The influences of "snap" courses is everywhere tacitly, if not openly, acknowledged. The fact that the college has broadened its curriculum so as to make it serve the needs of more types of young people also means that with its adjunct interests and activities it will attract some who are more or less intellectually indolent. Sometimes the mental awakening comes soon, sometimes it never comes, and a student passes through the college course and technically meets the requirements for graduation with an amount of work which would startle the shades of her theological or legal ancestors. The student rests upon the judgment of her fellows when making up a programme whose first characteristic is to be "easy." There are some cases which can be ignored, while others need bold or skilful handling by the officer in charge of registration. The specially interesting cases are those in which the officer is frankly called upon to assist the student in finding "snap courses," and, while he may never admit

it to himself officially, he may tacitly follow the lead of the student who says, "I am going to take this course because my eyes are troubling me," or "because I have been ill and must get back into work gradually."

Of course, the most interesting motive to be discovered in the choice of studies is simple love of the subject.[1] This may lead the student into paths which seem strange when looked at from a practical standpoint. Such a student when asked why she chooses calculus, archaeology, comparative philology, or constitutional government replies that it is for very love of the subject, as an intellectual indulgence, and gives ground for believing that scholarship as apart from bread-winning is among the ideals of American women. Every administrative officer will agree that such an experience uplifts him and illumines his whole work.

Considerations of sex are not generally taken into account by women, just as they are usually ignored by men in making a choice of studies,

[1] "I remember that my first idea of happiness of heaven was a place where we should find our thirst for knowledge fully gratified." Thus wrote Hannah Adams in 1832 at the end of a long life of struggle to satisfy her eagerness for learning, an eagerness which even led her, in defiance of all standards of womanly decorum, to venture into the reading-room of the Boston Athenaeum. (Quoted from Elizabeth M. Howe, *Association of Collegiate Alumnae Magazine*, February, 1908.)

in spite of the professedly final pronunciamentos of some educators that they are of paramount importance. It has been seen that the needs, real or fancied, of the individual are the guiding factors, but it occasionally happens that a girl is at the same time so old-fashioned in her views as to choose "womanly subjects" and so radical as to be led by the assumed fitness of a subject for her sex as a whole rather than for herself as a member of that sex. This choice by sex may take either of two forms. A girl may say that she will take literature, usually pronounced *literatoor*, and history of art because they are proper subjects for the feminine mind; or she may take physiology and sociology because women have a special interest in family and philanthropic life.

In general, then, the determining influences under which the student makes up her programme are the fact that a subject is required; the experience of good or poor training; a wide or limited opportunity for choice in the preparatory school; the advice of parent or teacher; the desire to equip herself for a chosen occupation;[1] the hope of an early pecuniary

[1] An experiment will be described in the following chapter illustrating the extent to which this motive if properly developed may be used to rationalize an elective scheme or to vitalize a prescribed programme.

return for her expenditure of time, strength, and money; the desire for an easy course; the popularity of an instructor; general student sentiment as to the value of a course; consideration of the needs of her sex, either as a general principle of determination or with special reference to her own case; and finally, simple aptitude and love for a subject. It must be admitted, however, that there are many students with whom there do not seem to be any determining influences, and who under the elective system merely drift through college from term to term, swayed here and there by fancy and caprice. The intellectual gains from this experience are pitifully meager in comparison with the expenditure made. There is therefore a growing demand for a return to a more or less fixed curriculum in the hope of securing more adequate returns in the form of intellectual discipline and co-ordinated knowledge.

CHAPTER XVI

THE COLLEGE CURRICULUM

The required curriculum may appear in one of two forms, either a course of study fixed by the faculty or courses chosen for the individual student by advisers or deans. In either case the college student is under the thraldom of the curriculum. The perusal of any set of college requirements proves this. Experience in fitting students to enter college proves it. Faculty discussion, administrative procedure, and departmental policies prove it. Whence comes this tyranny of the curriculum? Largely from traditional conception of the inherent value of certain subjects of study onto which is grafted the pressure for their continued recognition on the part of those who as scholars and heads of departments uphold their claims. In debate and discussion, in regulation and act, the procedure is the same—an emphasis on the importance of the subject, an ignoring of the needs and claims of the individual student. Members of college faculties often seem on the one hand atrophied in their judgments of human needs, and on the other ignorant of the constant change

in the content and method of subjects taught. President Eliot has said that there is not a single subject taught now in Harvard College as it was when he was an undergraduate, and that this is as true of old subjects as of the scores of new ones. Moreover, a fetich has been made of the term "liberal culture." Only that body of knowledge has been supposed to be available for the higher intellectual training which has no immediate relation to the life interests of the student. Like a hallmark on a standard metal, the same stamp of "liberal culture" must be put on every young person regardless of her previous training, her personal qualities, her ambitions for the future.

It has often been thought that the elective system would offset this difficulty. As has been shown, the practical application of the elective system often results in the drifting of a student through an amorphous course of study. In other cases it is known by administrative officers to be an elective system in name merely. The actual facts as they sometimes exist were discovered by an intelligent woman in her efforts to secure a well co-ordinated course of study for her niece, and were described in the following words:

I find that the supposed "election" in university courses in these crowded days only means that the student is compelled into a haphazard curriculum by an array of "conflicts" and "prerequisites" instead of being compelled into a carefully ordained one by faculty prescription, and I am using all my ingenuity on the university catalogue of studies and hours to escape that most objectionable type of prescription in my niece's case.

The factors in the situation which prevails at the opening of every college year are (1) the student who presents herself to her dean or adviser with a name by which she is recorded, a statement of the school from which she comes and of the entrance credits which she has or has not, a naïve and refreshing readiness to do what she is told, and a reverence for the requirements of the curriculum which is exceeded only by that of the dean himself; (2) a dean who is an administrative officer, not often a trained educator, who knows the time schedules and names of courses better than he does the principles of psychology or the methods of instruction followed in the different classrooms; (3) the curriculum with its appurtenances—the time schedules and the unending list of rules and prerequisites; (4) too frequently instructors who are eager to get from their classrooms to their writing or research, who think that their duty is limited by the classroom or the occasional

conference, who chafe under the necessity of attending faculty meetings to make regulations directed toward the limitation of social, athletic, dramatic, or musical activities, or to approve the measures of discipline or penalty proposed by the dean.

This is the beginning of the college course. Later the student drifts on, sometimes seeking and not always finding expert advice as to her choice of studies, sometimes not knowing whither she is drifting, but trusting that she can stay in college and make her degree.

This may seem a dark picture, but it is only too true a one of the conditions which prevail with hundreds of young women who go to college in these days without any background of culture, who have no conception of scholarship, and who choose the college career for the general social experience it will furnish them, from a credence in the tradition that it will give them "an education," or from an eager desire to fulfil the ideals of which they are vaguely conscious.

President Wilson has said[1] that education "consists of the vital assimilation of knowledge, and the mode of life for the college as well as

[1] Woodrow Wilson, "What Is a College For?" *Scribner's Magazine*, November, 1909, p. 577.

for the individual is nine parts of the digestion." The analogy is an excellent and a useful one provided account be taken of the nature and needs of the organism which is to do the assimilating. In fact, the college faculty seems content to prescribe a dietary, regardless of the person to be fed.

Then, too, it is true that the mode of feeding is nine parts of the digestion, and here again the college is often making the mistake of assuming that the curriculum makes the college, whereas surroundings, organization, discipline, and atmosphere may count for more in a liberal education than definite instruction.[1]

Passing these important matters by for the present, attention should be paid to the primary defect of the college today. It teaches subjects, not persons. An analysis of the way by which the curriculum may be subordinated to the individual rather than placed like a yoke about her neck will lead to the view that the educational machinery is of use only when it trains for efficiency, and that the kind of efficiency which the student is to acquire must determine the course of study which she should pursue. This is the most important step to be

[1] Henry C. King, *Personal and Ideal Elements in Education*, p. 42.

taken at the outset of a student's course. While it may involve difficulties so great as to demand much more skilful, sympathetic, and expert counsel than college students in general receive, or the colleges at present possess, there are certain elements which are common to all students. Everyone is to be made as efficient as possible as a human being, as efficient as possible as a citizen, and as efficient as possible in some one direction so as to justify her existence through some form of service in a social institution.

This means in brief that the student shall start upon her college course with the idea of fitting herself for a vocation in the large sense. In other words, in all her work and studies and activities she must have a definite goal in mind. The traditional view, to be sure, is that the student must not be allowed to displace the educative element with the "occupative."[1]

The truth is that these two processes are not consecutive, the occupative following the educative. "They go along together, overlapping, playing upon each other, enriching and diversifying life as a whole, and increasing its range and volume."[2]

There is an idea which is held in great rever-

[1] C. F. Thwing, *The Forum*, February, 1901, p. 735.

[2] Abraham Flexner, *The American College*, p. 141.

ence by those unacquainted with psychological processes or blind to the need of adapting educational methods to changed demands, who insist that the college student must be taught to think, to appreciate, to be righteous, in abstract terms or in the terms which were very concrete and "occupative" a few generations ago.[1]

In the belief that "thinking, appreciating, and being righteous" could be acquired more effectively through the medium of concrete interests, a canvass was recently made at the University of Chicago of 96 freshman and sophomore women chosen from the beginning of the alphabetical list. It resulted in showing the following choices of vocations: teaching (embracing: general, 23; Latin, 6; household administration, 5; English, 4; history, 3; mathematics, 3; language, 2; French, 1; drawing and ap-

[1] "Let women and men be trained in those studies which train them to think, which will give them the power of appreciation and make them righteous."—C. F. Thwing, *The Forum*, February, 1901, p. 735.

"The chief mission of the college is to train the young, not for special fields of work or any special theories of reform, but to enlighten and broaden and inspire, to train to the careful weighing of evidence, to the scholarly knowledge of facts and the experiences of history, to the testing of theories of what has been already tried, and all as the basis for individual independence in thought and life."—President J. M. Taylor, Address to Vassar College Alumnae, 1909.

plied design, 2; history and literature, 1; German and Latin, 1; German, 1; public speaking and physical culture, 1; kindergarten, 1; grammar grades, 1; biology, 1); general culture, 5; librarianship, 4; journalism, 4; music, 3; homekeeper, 2; Y. W. C. A. work, 1; medicine, 1; landscape architect, 1; research work, 1; private secretary, 1; geological survey, 1; French and Spanish, 1; not specified, 15.

Following this canvass, a series of conferences were held to which all the women of the first two years were invited. Because of the small amount of time available, seven were held simultaneously on one day in different places, and nine were on another day. They were led by heads of departments or members of the faculty specially qualified to speak on the essentials of good education, the opportunities for women in different vocations, and the facilities offered in the university for training to enter the different fields.

The numbers of women in attendance were as follows: teaching (Greek and Latin, 29; mathematics, 20; history, 25; modern languages, 27; English, 50; kindergarten and elementary grades, 8; sciences, 21); household management, 40; civic and social work, 15; home and foreign missions, 4; medicine, nursing,

and hygiene, 7; physical education, 9; art, 11; vocal interpretation and drama, 20; librarianship, 20; journalism and writing, 30; total 336.

The cynic, after reading in the canvass figures that only 2 out of 96 women specified homekeeping as their vocation, might bemoan the influence of college education on the future of the race. He should remember two facts: first, that college training is as yet not often taken by women who have this vocation specifically in mind, and second, that in the present state of public sentiment it is not expected that a woman shall openly and avowedly express this as her choice of a vocation. Comfort and hope would come in learning that the conference on household management drew the largest attendance but one. It may be suspected that some at least of those who are accounted for under the head of "not specified" made known their interests in this less conspicuous manner.

In the registration for studies which followed closely upon these conferences, use was made of the knowledge thus gained, and each student was shown how even the courses which an all-wise faculty had prescribed could be related to the student's specific needs rather than be considered as a required course adopted by the

faculty as an abstract principle and to be resented by the student simply because it was thus determined without reference to her individual needs.

The most convincing feature of this experiment was the evident vitalizing of the college experience, the realization that general training and culture have a definite part in good citizenship and in the most effective service. Moreover, the transfer of emphasis from the tool or the subject of study to the object in hand seemed to place the emphasis at a point where it could be understood. The importance of securing definite results from all the work undertaken evidently led the student to look upon her college experience in a new light and added zest and enjoyment to what would have proved otherwise a more or less perfunctory task.

It should be clearly understood that no young student should be expected or required to make an irrevocable choice of a vocation at the outset of her college course. Such a procedure would be manifestly absurd. Freedom should be granted to make a subsequent change, and more than one if reasonable grounds are presented. The difference between this method of determining choices of study and the free elec-

tive system lies in the point of view. Every choice must be justified with reference to a specific end. It must also be remembered that in the majority of cases the studies chosen will inevitably lie within the field of those which have been proved to be the best instruments for the end sought.

Required English, language study, history, science, psychology, all assume a new significance and are recognized as essential tools in the accomplishment of the student's purpose. It may be feared, however, that the adviser felt some qualms lest in some instances the method of instruction and the attitude of the instructor toward the student might not be in accord with the plan of the student and the adviser.

This touches, of course, a vital point in the proposed suggestion, viz., the efficiency of the college professor as a teacher and his qualities as a human being. Stress has heretofore been placed on investigative ability and learning as the prime requirements for a college teaching position. Such general dissatisfaction prevails with present conditions that discussion of this point is here needless. It is enough to suggest that while true scholarship is essential in a great teacher, such scholarship may properly

take the form of interpretation rather than of creation in the college teacher.[1]

Under such leadership the college student will acquire genuine culture, will receive an impulse to be master of a subject, and will develop a sense of power that will enable her to adapt herself successfully to new and untried conditions if she should be compelled so to do.[2]

[1] Grant Showerman, "The Making of a Professor," *Atlantic Monthly*, November, 1909.

[2] C. F. Birdseye, *The American College*, p. 334; F. M. Perry, *Science*, December 10, 1909, p. 848.

CHAPTER XVII

SOCIAL ACTIVITIES

The tradition prevailed for many years and is still current to some extent that the college experience represents a period of time during which the student is withdrawn from the world and given an opportunity to "cultivate his mind and heart by contact with things intellectual and spiritual in a society devoted to those invisible things on which the abiding greatness of our life depends."[1]

There has arisen, however, of late, another view of the function of the college experience. An increasingly large number of young people go to college openly and avowedly for a so-called "good time." They and their parents talk as if these years in college from eighteen to twenty-five were a respite granted to a convict before entering upon a term of penal servitude, instead of years to be spent in training intellect and character, in learning to order the daily life with a view to the greatest enjoyment and usefulness. The college often charges the schools and the homes with the responsibility

[1] Andrew F. West, *American Liberal Education*, p. 67.

of furnishing to it students marked with mental and moral flabbiness and with flippant purposes, rather than with capacity for sustained and well-directed effort. The college, however, is not doing its part to set matters right and remold this material which is still, to a considerable extent, plastic. Faculty and friends eagerly present the gay and the social side of college life; sports and pastimes rather than libraries and laboratories are often used to allure; the standard "good time" is frequently that of the inexperienced and uncultivated; college esteem is granted on a basis of social boisterousness, and morals and manners are judged by the measure of the phrase "boys will be boys" and "girls will be girls." It is usually forgotten that the grandfathers and grandmothers of these boys and girls at their age were carrying heavy responsibilities in the home and the community. The college is largely to blame that there is a growing doubt in the public mind as to the value of this great educational machinery which turns out so many weaklings and incompetents. The evil is, as yet, greater among young men than among young women; but the tendency exists among women, and must be checked. Much of it is purely artificial. A young woman often would take more pleasure

in doing her college work than in going to a dance or a sorority meeting or taking part in a dramatic performance, just as a young man under the pressure of public opinion cuts the recitation or laboratory work in which he is really interested for a football rally, or goes on a glee-club trip. These activities are often assumed in the name of "college spirit" or in an effort to be popular or to try to meet the standard for a "good time" which is recognized by college sentiment.

There is a hue and cry, too, that American colleges have too much social life. A careful study of the actual situation, however, shows that the trouble lies in the fact that the social life is not always of the right kind or properly distributed, rather than that it is excessive. For every one student who has an undue amount, there are always several who do not have enough social diversion or training. The group of students that make up the "social set" is in most American colleges comparatively small. On the other hand, the number is lamentably large of those who have been used to participating actively in the social affairs of their home towns, and who find themselves on entering college almost wholly without social opportunities. There is still another class who have no

aptitude for making friends, who are awkward and ill at ease, who are ignorant of the fact that successful social life means giving quite as much as taking, and who withdraw into themselves and not infrequently become a little cynical and quite unjust in their attitude toward their fellows.

In other words, the college has allowed amusement in the form of dissipation to flourish, while amusement which might serve as recreation, and social agencies which could be employed as a part of the educational process, have been neglected.

And yet in sports, games, and dancing, in play of all kinds, the acquisition of skill and grace in the use of the body should go hand in hand with pleasure and recreation. The dramatic sense, as some colleges have recently proved, may be trained and satisfied by the use of really interesting dramatic material and the elimination of the grotesque and silly, at no cost to the sum of individual and community pleasure. In such organized activities, moreover, there is the possibility of the development of a truly moral power, of qualities essential to good citizenship, of characteristics which the life of a recluse fails to reveal and without which the individual is nearly helpless as he confronts

the actual situations of life. As it is impossible to train the power to think without giving concrete subjects to think upon, so it is futile to expect young people to be capable of social adjustments and to show moral power in meeting social problems unless their training has given them the opportunity to gain a sense of values and a power of expression and control in such matters.[1] The opportunity to acquire ability to say "yes" or "no" when an issue of right or wrong presents itself is constantly present in the conduct of so-called "student activities," and the institution which contents itself with a policy of repression or the board of control which acts on the assumption that its chief function is to forbid rather than to direct, adjust, and develop, fails to use one of the most important available educational agencies.

Nor is the problem a very difficult one; for if the intellectual life is of the right kind there will be no possibility of temptation to an excess of social life; if it is sufficiently exacting there will be little disposition to fritter away time on meaningless pastimes. An interesting illustration of this fact may be found in the effect of

[1] "Student activities require of their officers and members industrious application and administrative abilities of no mean order."—Homer Edmiston, "A Classical Education in America," *Atlantic Monthly*, August, 1909, p. 269.

measures recently adopted at one of the large universities with a view to securing more and better intellectual work from the students. An interesting development which shortly appeared was a falling-off of six dollars per day from the use of billiard and pool tables in the men's clubhouse.

An aspect, too, of social training which it should not be beneath the dignity of any educational institution, even a college, to notice, is the forms and observances which make social intercourse agreeable. There are in American colleges large numbers of students who have not had at home an opportunity to learn the social forms and observances which prevail in large and complex groups, and yet who realize that this deficiency in social training will be a serious handicap in later life. Undoubtedly they often greatly overestimate the importance of what are really not essential factors in the social structure. Just, however, as the machine needs its lubricant to do its best work, the member of the social group who is familiar with the amenities of life can do his work and exercise his influence with less friction than can he who ignores them.

That this fact is appreciated by the students is not often recognized by the faculty. The

following incident doubtless represents a generally prevailing condition. Sixty-four women students of the junior colleges of the University of Chicago chosen from the beginning of the alphabetical list were recently asked, as one of several questions bearing on their academic programme, what kind of social training they thought they needed. Twenty-seven replied in practically the same words "to be a good conversationalist," and twenty-one expressed a desire "to have greater ease in meeting strangers," while many others expressed the same ideas in other phrases, such as "more ease of manner," "greater self-possession," "to overcome lack of ease and self-consciousness at social affairs," "the ability to receive and entertain easily," "to become a better listener," "to feel at home in any situation."

It would seem not unsuitable for an educational institution to provide opportunities to meet so conscious a need. No one knows better than the college instructor and his wife how discouraging it is to offer social opportunities in the line of private hospitality. The students are awkward, silent, embarrassed, a social dead-weight. The gap between faculty and student is apparently unbridgeable, but quite often the responsibility for a lack of social

responsiveness rests not wholly with the younger people. There should be, however, such an attitude of friendliness on the part of all members of the college, teachers and taught alike, that the establishing of social relations should be in many cases a source of real satisfaction and joy. The chief agency to be depended upon must be, nevertheless, not private hospitality but the organized and recognized social functions of the institution. Here the members of the faculty and the ladies of their families can contribute in large measure to the establishing and maintaining of suitable conventionalities. Such details as invitations, escorts for chaperones, form and manner of receiving, introductions, and the like, may very well be directed in such a way as to be an object-lesson in approved customs. Patient and persistent must be the attitude of those who make this contribution. One has to guard against feeling resentment at instances of discourtesy, and realize that ignorance rather than intention is the cause. The same things have to be taught over and over again in this as in all subjects to the troops of new-comers, but there is the advantage here which perhaps other subjects do not always present, that the new student is very eager to acquire a knowledge of approved social usage

and has a keen desire to avoid making social blunders.

The paucity of social resources in many colleges, making the dance thereby the function of paramount interest and importance, is to be regretted. The situation which arises impels a careful consideration of all the factors involved, and it is fortunate that this form of entertainment if wisely directed affords so many chances for different kinds of social training. In institutions where dancing is officially forbidden on the premises and students resort to public halls where there is no competent chaperonage or oversight, there is often little effort made to provide an adequate substitute, and the whole problem of social training is largely ignored. Here the policy of repression is really one of admitted failure. It has been asserted that "the presence of men is the determining force" in social affairs in the narrow sense, and that "where there are men, the women are less likely to control social affairs in which they are interested than where there are not men."[1]

This is a condition so at variance with what is desirable and even necessary, that too much emphasis cannot be placed on the importance

[1] Lucy Sprague, "The Control of College Social Life," *Association of Collegiate Alumnae Magazine*, December, 1908, p. 51.

of a readjustment. One of the greatest gains needed in the education of women is a revival, through adequate training, of their peculiar influence in unorganized social activities and then out and beyond into the organized social activities in which they are destined to play an increasingly prominent part.

CHAPTER XVIII

HYGIENIC EDUCATION

The term hygienic, rather than physical, is used here in the conviction that health and vigor of body are only part of the larger health and vigor which human welfare demands, and that the value of bodily strength must be measured by the results it achieves in making the body an efficient agent of the mind in a larger social service.

The hygienic training which the modern woman needs may be grouped under the following heads: physical exercise, nutrition and dietetics, sanitation, personal hygiene, social hygiene, and eugenics.[1]

The lack of opportunity to secure such training was noted as early as 1882. In that year, when the Association of Collegiate Alumnae was organized, the first subject which it took up for investigation was physical education in the colleges in its membership. The following tabular statement was prepared, which showed how inadequately the subject was treated:

[1] "Eugenics is the study of the agencies under social control that may improve or impair the racial qualities of future generations, either physically or mentally."—Minutes of the Senate of the University of London.

Lectures on Physiology	Lectures on Hygiene	Gymnasium	Calisthenics (Under Supervision)	Athletics (Under Supervision)	Physician	Hospital and Nurse	Voluntary		Definite Course of Physical Education
							Ath. Assn.	Boating Skating (Lake)	
Oberlin	Oberlin	Oberlin	.....	.....	.....	.....	.....	.....	.....
Vassar	.....	Vassar	Vassar	.....	Vassar	Vassar	.....	Vassar	.....
Cornell	Cornell	Cornell	.....	.....	.....	Cornell	.....	Cornell	.....
Michigan	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wisconsin	.....	Wiscon'n	.....	.....	.....	.....	.....	Wiscon'n	.....
Boston	.....	.....	.....	.....	.....	.....	.....	.....	.....
Smith	Smith	Smith	Smith	.....	.....	.....	.....	.....	.....
.....	.....	Wellesley	Wellesley	.....	Wellesley	Wellesley	.....	Wellesley	.....
Wesleyan	.....	Wesleyan	.....	.....	.....	.....	.....	.....	.....

Although great progress has been made along many lines, the colleges are still far from meeting adequately the conditions laid down by the Association in 1882 as desirable, viz.:

1) The introduction of a consistent, thorough, and scientific course of physical education for women.

2) The appointment of a thoroughly competent woman as an instructor in this department, who shall superintend the gymnasium, give practical courses of lectures, and be, as far as possible, responsible for the general health of the women in her classes. Where the dormitory system obtains, the appointment of a resident physician is also urged.

3) The provision of an adequately equipped gymnasium.

4) The provision of one or more courses of lectures by non-resident specialists on physiology, hygiene, sanitation, heredity, athletics, gymnastics, etc.

5) The provision of special libraries on subjects pertaining to physical education.

6) Careful study in the construction of buildings for recitation and dormitory purposes, with special reference to counteracting the acknowledged evils of the dormitory system.

7) The requirement (whenever practicable)

that candidates for admission shall reach a certain standard of attainment in physical education.

In all these fields of knowledge there has been immense progress during the past few years. The gap, however, between knowing and doing what is known is still immense, particularly in the so-called higher institutions of learning. It would not be difficult to make a long list of universities famed for the contributions of members of their teaching and investigating staff to the world's theoretical knowledge of right hygienic conditions, which at the same time allow these investigators to pursue their researches under conditions intolerable from any rational standpoint, and whose students and teachers live and work in dormitories, classrooms, libraries, laboratories, and gymnasiums where proper air, light, and cleanliness are almost unknown. Nearly every known law of health is violated to such a degree that the indictment of conditions found in many schools, made by a recent writer, might be made equally against them:

> If the amount of close-range work is rapidly manufacturing myopic eyes; if bad ventilation, whether due to faulty construction or to faulty management, is preparing soil for the tubercle bacillus; if children with contagious

diseases are not found and segregated; if desks are so ill adapted to children's sizes and physical needs that they are forming crooked spines; if too many children are crowded into one room; if lack of air and light is producing strained eyes and malnutrition; if neither open-air space nor time is provided for exercise, games, and physical training; if school discipline is adapted neither to the psychology nor the physiology of child or teacher, then the state is depriving the child of a greater right than the compulsory education law forces it to endure. Not only is the right to health sacrificed to the right to education, but education and health are both sacrificed.[1]

The following is a brief outline of the kind of knowledge and training which should be included under hygienic education.

I. Through physical exercise, every woman should learn the free and full use of her body. This does not necessarily mean exceptional muscular skill or strength; it does mean physical liberty.

Huxley, in his summary of the factors which go to make up a liberal education, said that "that man has had a liberal education who has been so trained in youth that his body is the ready servant of his will and does with ease and pleasure all the work that as a mechanism it is capable of."[2]

[1] W. H. Allen, *Civics and Health*, p. 150.

[2] T. H. Huxley, "A Liberal Education and Where to Find It," *Science and Education*, p. 86.

The training should be such as to develop courage and self-reliance. The body should be the servant of the mind, the physical response following immediately the mind's bidding. Together with this individual exercise and development should go spontaneous play and those forms of training known as games or organized athletics which develop the social and moral qualities needed[1] at every turn in the social life of today.

In direct connection with physical exercise there should be instruction in regard to the phenomenon of fatigue and its causes and the function of rest. It is true that the world is only on the threshold of knowledge concerning this phenomenon with its physiological, chemical, and psychical implications, but what little is known is often sedulously avoided in the training of the young as well as in the practical workings of adult life, except as instinct proves to be some sort of a guide. Each woman should know how to distinguish in whatever she does between the degree of fatigue which leads to increased vigor or tone and that which is deleterious and weakening in its effects. It is true that a woman could not always draw the line at the right point even if she knew it, but the

[1] Kellor and Dudley, *Athletic Games for Women.*

extent of her effort and the way in which it may be directed are far oftener within her control than she is willing to admit. A more careful study of the whole matter is, of course, necessary, but a beginning in establishing right habits and practice can be made. The time will undoubtedly soon come when the conditions as to speed and hours under which the industrial woman works will be regulated in response to a knowledge of what is true efficiency as well as economy in the human machine. Similarly, educational authorities will compel an adjustment of the horarium to the periods of greatest mental vigor instead of assigning tasks to a time of the day when mental fatigue is at the maximum, as any university student can testify is frequently done.

The counterpart to fatigue is naturally rest, and here again there is not only great ignorance but astounding stupidity. For example, it is not always known that fatigue of one tissue from over-use means the fatigue of all tissues, that extreme activity of the muscular system involves not only lessened muscular but also lessened mental activity, and that consequently under such conditions rest of all tissues is demanded. Even when people have this knowledge from scientific sources or as the result of

repeated experience they frequently go on lashing the system to new effort, merely changing their activity from one form of expression to another. The most effective forms of rest and their adaptation to individual needs and peculiarities is a matter strangely overlooked by those who have the direction of young people, both at home and in school.

II. Another method of determining the efficiency of the body is through nutrition. Here again, although our knowledge is not profound, it far exceeds our practice, except, perhaps, in the feeding of domestic animals for pecuniary profit. Not only is the individual left in ignorance as to the function of food and the principles of dietetics, but whole groups of young people have their daily living directed in total disregard of the processes by which food may be used to form protoplasm or furnish energy, or on the other hand, yield harmful products reacting disastrously on the whole organism.

They should know how it is that simple and palatable nutriment, accompanied with an adequate supply of oxygen furnished through the lungs, will keep the mechanism in good order and enable it to perform work, provided at the same time care is taken that the waste products of the nutritive process are systematic-

ally eliminated. Beginning with the earliest year, every child should be trained at school, if not at home, in right habits of eating, and later should be given knowledge of the principles of dietetics and of the preparation of food.

III. Instruction in the laws of health and their application through sanitary practice should begin in the lowest grades and should be an integral part of a young woman's training, even through the highest grades. Every woman needs such knowledge for her individual protection, for the maintenance of health in the community and incidentally for the promotion of a private and public moral sense. The meaning of cleanliness and its significance to the individual as a means of protection against disease should be explained and insisted upon. The necessity of clean air and pure water should be constantly made clear. Ventilation, plumbing, and disposal of wastes are matters whose importance is clearly understood, and no young woman should be allowed to grow up in ignorance concerning the simple principles involved or to ignore these principles in practice. But women should have this knowledge not only for their individual needs. There devolves upon them, especially as housekeepers and teachers, the largest opportunity for maintaining

health conditions among groups of people. "Take care of the houses and the towns will take care of themselves," was the phrase used by the great English sanitarian, Dr. B. W. Richardson,[1] in pointing out his belief that the future of sanitary science depends upon women. The importance of the school also as a factor in public health is recognized more and more as time goes on, and teachers are now beginning to realize the extent of their responsibility.

Finally, there is no better agency for developing the moral sense than an appreciation of what conformity to hygienic laws means. An insight is given into the value of co-operative effort, and the importance of subordinating the immediate individual preference to the welfare of the group is seen in its real light. The co-operation of woman in this field is needed both for the physical and for the moral advancement of the community in which they live.

IV. Personal hygiene in a narrower sense is a subject which should be a part of every young woman's training. Cleanliness of person and that neatness of attire which is an almost constant accompaniment of cleanliness should be insisted upon with all young persons, and its

[1] *Our Homes*, Introduction by Dr. Benjamin Ward Richardson, p. 2.

significance taught at every turn. The hair, the teeth, and the skin are too frequently signs of neglect in the essential principles of education. It is often not realized that care in such matters not only results in actual saving of time through securing a better state of health, but also indirectly saves time through contributing to a more methodical and accurate manner of working. Such knowledge should be acquired, of course, before the collegiate period, but if it has not been, the college should make good the lack by informal direction if not by formal instruction.

Closely allied with these phases of hygiene is the physical care of little children, some of whose principles should be taught to every young person, boy as well as girl. Upon them often rests a large part of the direct charge of the younger members of the family especially. In some cases, as when the parents are at work during the day, the responsibility is wholly theirs. Even among more well-to-do people the knowledge of the elementary principles of child hygiene should be a part of the equipment of everyone for later duties in life.

V. It is but a step from this point to the subject of social hygiene and eugenics. Here it is impossible to draw a line between the educational needs of the two sexes. There exists at

present an imperative social demand that girls should be trained to be wives and mothers and boys to be husbands and fathers. American homes are suffering from a lack of wisdom in regard to the problems of parenthood and child culture. The following statement claims attention:

> The family is not only the source of life of the nation, but the conservator of the morality of the race. The moral element in this problem of prevention cannot be ignored. Observation shows that men are the responsible authors of these social crimes—women the victims. The root of the evil is grounded in the double standard of morality. . . . . These crimes against the family will continue until women know, as they have a perfect right to know, the facts which so vitally concern their own health and the health of their children. When they know that the standard of morality which they now tolerate in the men they marry is the responsible cause, the woman will demand of the man she receives as her husband and the potential father of her children, the same moral standard which the man has always required of the woman he takes as his wife. The emancipation of woman will never be complete until she is free from the shackles of a traditional code, based upon the ethical heresy that one-half of humanity has imperious duties which the other half may repudiate or disclaim. The result will not be to debase woman but to uplift man to her higher standard.[1]

[1] Dr. Prince A. Morrow, *American Journal of Sociology*, Vol. XIV, p. 163.

The incapacity of husbands and fathers to contribute their share to the family life is manifestly increasing because of the growing pressure of the counterclaims of business and professional interests. Race suicide and divorce are symptoms of a social disorder doubtless very grave and certainly very evident, whose remedy lies in the direction of training both boys and girls for parenthood.

Modern pedagogy is urging the enrichment of the school curriculum for boys by teaching them social and industrial history, practical economics, civics, the organization of society, financial methods, even if this involves the withdrawal of the older so-called disciplinary and cultural studies. Business success is the aim in view. We should declare with at least equal emphasis that the boy should be trained for his other duties in life. In spite of the pronunciamentos of chief executives and the higher clergy, the evidence of physicians and of social investigators is to the effect that men are more responsible than women for the decline in the birth rate. Boys should be taught the principles of social hygiene and their part in maintaining life upon high levels. Then, with this increased knowledge, their moral natures would be aroused and strengthened, and the difficulties

by which all teachers who deal with young boys are baffled would largely disappear. There should be analogous training for girls, for good mothers are not the product of instinct merely. Wifehood and motherhood are too often now the price of escape from a certain kind of slavery to parents and from bondage to conventionality. The social demands of the present time make it no longer sufficient to think of the boy in the light of his future trade or profession or even as a citizen, nor of the girl simply as a married woman, or even trained in some independent vocation. Throughout all their training must run the idea of their high function—that of parenthood.

It is time for the demand to be made of the educator that instruction in sex health be given to young people. Admirable suggestions[1] as to its practicability have been made. It is essential that the normal aspects of the subject should be emphasized—the pathological and immoral may be ignored, except in individual cases. The child whose environment is healthful and whose activities are wholesome has a state of mind which reacts soundly to instruction in sex health as it does to the allusions to sex distinctions and sex functions which the child

[1] W. H. Allen, *Civics and Health*, chap. xxxix.

comes across constantly in reading, studying, and the daily experiences of living among people. A frank and simple explanation of the biological principles of life made either directly or through the medium of botany, zoölogy, or physiology reaches the desired end, a wholesome attitude of mind, and does much to offset the insidious harm which arises from allusions made on the sly by evil-minded companions or through unsuitable reading. The knowledge is bound to come to every young person through one channel or another. There is every reason for determining its character in advance.

It is needless to say that parents and teachers who give the knowledge of the principles and practice of sex health must be wise and sympathetic. They must be thoroughly informed themselves as to the principles involved. It is regrettable that there should be so many self-confessed incompetents before one of the gravest duties which belong to parents and teachers.

When parents and teachers have a real knowledge of the social and economic aspects of general health they will be able to solve quickly and satisfactorily the problem of instruction in sex health.[1] In the meantime there devolves

[1] Allen, *op. cit.*, p. 390.

upon the college a most important duty in making good the defects of early training in these vital matters. This responsibility the college cannot be allowed longer to evade. The peril to the whole social fabric is too great to justify the existence of so great an educational need in any considerable number of the young men and women of a nation.

CHAPTER XIX

THE DOMESTIC ENVIRONMENT OF COLLEGE WOMEN[1]

There travels about the country from time to time a group of men consisting usually of the president of a college or his personal representative, the leading member of the board of trustees, who is frequently a successful business man and a benefactor of the institution, and the official architect, who has recently completed a chapel or a chemical laboratory. No woman is a member of the group. Their function is to inspect women's dormitories with a view to securing data and suggestions on which to proceed in the erection of a woman's dormitory for their own institution. Their inquiries follow these general lines: How many girls do you accommodate in a building? How many sleep in a room? Is an elevator necessary? Is laundry work furnished? What rental do you charge? Do you provide closets or wardrobes? At what time are the lights put out? What furniture do the rooms have?

The usual conception of the dormitory is so

[1] A paper embodying these views appeared in *Religious Education*, April, 1909.

mechanical, and its administration so frequently thought to be a matter of rules and restrictions, that it is small wonder if, when a new woman student is asked if she intends to live in a university hall, she replies, "Oh, no, I shouldn't think of living in the dormitory. I have had enough of discipline and herds of women, and must live with greater regard to my personal needs."

The problem of the dormitory contains many more features touching on the inner life of students than the architect, the financier, or even the administrator ordinarily recognizes. The very use of the term "dormitory" shows how little conception college authorities have of the real function of a building in which the student is to receive some of the most profound and lasting impressions of her whole college life. It may be for sleep, it may be for shelter, but it has many other needs to meet, and it should be adapted to those needs also, and the activities which go on in it should be such as will enrich the nature and develop the character of those who live within its walls, as well as correlate the discipline of the classroom with the demands of life. The framework of the body is of importance only as it serves for the expression of the spirit that occupies it.

An obvious starting-point for the presentation of the subject is the fact that for the greater part of four years the college hall furnishes to the woman student nearly all that she has of home life. These college years are precious years in a woman's life. Quite as much as previous years, they serve to establish standards of conduct, of principle, of social efficiency, of appreciation, of discrimination, and of moral power; and, because the family and the home are the most effective agents in these forms of education, it is essential that the college hall, in which the woman student spends a large part of her time, should be organized as much as possible like the family and the home.

It should also be noted that, side by side with the present-day questionings concerning the effects of modern conditions on the home and the family, there is a deepening realization that the fundamental principles of these institutions are essential for the well-being of the individual and of society, and that their permanence will depend very largely on the position of women and the attitude of women toward them. For the sake, then, of the home and the family, those features of social and domestic activity which characterize institutional life must be reduced to a minimum in the college residence,

even though it may be impossible to eliminate them all. The student during these college years should be kept under influences which will later make her shrink from those aspects of organized living which involve the sacrifice of the real functions of the home. The boarding-house and the hotel, the rented furnished house, and the yearly moving do not characterize the family, and the college woman must learn through her own experience to place a right value on them.

The ways in which the methods and ideals of the home can be worked out in the college hall depend on the human material to be dealt with. It is a body of eager, teachable, well-meaning, responsive women, no longer girls, entering with enthusiasm upon a great new experience, ready to make the most of their opportunities, and characterized by those qualities of intelligence, adaptability, and alertness which distinguish the American woman. In these respects there is no difference between those who come to the college from the East, the Middle West, or the Pacific Slope. Everywhere, of course, there are occasional exceptions, the giddy, the flirtatious, the vulgar, but they are so rare and unimportant that they need not be considered as a class. Their omission from

consideration as a factor in the problem leads to their disappearance. Any system, social, domestic, or educational, in the college which is based on their needs or on the assumption that they exist in considerable numbers is bound to be a failure, not only for others, but for them. A system which will permit of individual treatment and the speedy elimination of the obviously unfit and misplaced is the only proper system.

The first aspect of the family which should characterize the residence hall is corporate life. It should, as Professor Tufts says of the family, "afford an opportunity for training in those qualities of disposition and character which are essential to citizenship." Mr. Flexner's idea of the failure of the college to train a boy to be a member of an organized order with obligations and privileges is quite to the point here. The college hall is not at its best when, to paraphrase his words, it is "a mere mosaic of sharply accentuated personal units." The organization of the group living in the hall should be such, then, as to bring all into relation with all, and to have all realize the privileges and obligations which must be recognized if the life is to bring adequate results. By this is not meant so-called "student government." The term "government" has no more place in con-

sidering such a group than it does in a well-organized family. There is no question there of government in all the countless details which make up the sum of the daily life. It is co-operation, mutual understanding, sympathy, generosity, and thoughtfulness. In the crisis, the sorrow, and the problem, the greater experience and wisdom of the parents are drawn upon, and likewise in the college home there must be some authority or permanent directive power ready to act in emergencies and to guide the complex group. For complex it must and indeed should be, and there should never be any attempt to grade or classify students in assigning them to college homes. Older and younger, grave and gay, cultured and crude, experienced and immature, gathered in one group, mutually give and take in ways which react favorably for all, if the right spirit prevails.

The means by which this corporate life may be developed and moral results secured from it are very simple, and again are such as characterize successful family life. One of the pleasantest and most effective is the exercise of hospitality. Here the whole household may be brought together, each member with a share in the preliminary preparations, each jointly responsible as hostess, and the occasion may

be so planned as to afford opportunity for the use of individual gifts in music, acting, decoration, business arrangements, or social grace, and, what is still more important, to serve as a means of education in these directions for members of the group who have had little experience or training. Intra-hall social gatherings, large and small, also serve to bring out strong feelings of mutual interest and obligation.

The architectural features and domestic arrangements may be made to contribute largely to the success of this phase of education. Convenient, attractive, and spacious rooms for social purposes, and a flexible system in the housekeeping department are essential. For the birthday party, the entertaining of a mother or visiting friend, or the celebration of some event of interest to a small group, opportunities for special luncheons, dinners, or teas, should be provided, and equipment for light cooking, more convenient and more safe than the chafing dish, may be the means not only of great enjoyment and comfort, but of real and valuable training.

In connection with small social and hospitable ventures of this kind there is opportunity for the discussion not only of the unimportant conventionalities, such as forms of invitation

and proper methods of receiving guests, but of the more important questions of the chaperonage necessary when the gatherings include both young men and young women, the occasions on which supervision is desirable, and the ways in which they may meet with assured freedom because of the certainty of adequate protection under a control which is largely the expression of the public opinion of the group. Men and women may thus have opportunities to meet simply, even frequently, without the feeling of sex-consciousness which is often aroused solely because of arbitrary prohibitions.

A corporate interest in some charity or in the different official affairs of the institution or of the student body, calling for representation, gifts, or business co-operation, is still another means of useful training which should be developed in the hall. A simple illustration may be given. On the marriage of a maid-servant known to several generations of college students, a conference is held to discuss plans for making her a wedding gift. This means not merely raising the necessary fund and making the purchase, but considering her needs and choosing the gift in accordance with her preferences and the circumstances in which she will be placed. Though seemingly trivial, this experi-

ence may serve to give each one sharing in it a more appreciative and intelligent understanding of people whose interests ordinarily differ from her own.

Another way in which the moral power which comes from co-operation in a common interest may be secured is through the discussion and formulation of house customs, and the determination of such details as the hours during which quiet should be maintained or the way in which Sunday should be observed. Responsibility for the order and attractiveness of the social rooms, for needed repairs, and for the maintenance of a reading-room may be properly shared by the group. Conferences in regard to the renovation of furniture or decorations may serve a useful purpose, while an organized movement to secure needed improvements or additions to the furnishings, such as vases, lamps, or books, may be encouraged occasionally for the influences it fosters.

But the family does not fulfil its sole function when it trains its members to contribute to the efficiency of a larger group. There must always be a place in the family for the development of individual powers. So, too, with the college hall. Not only should it serve to make each individual a more efficient part of a larger whole,

but it should afford an opportunity for the growth of those moral attributes which should mark human relations whenever one individual comes in contact with another. Persons living in isolated independence, a condition which theoretically has many attractions, lose the chance to gain breadth of view, tolerance of opinion, kindliness and generosity in act and in word afforded by residence with others. It is a familiar fact that illness or sorrow or perplexity always arouses a spontaneous and unlimited spirit of helpfulness, and opportunities for its expression occur frequently and under many guises in a large household of women. Looked at from another point of view, the intimacy of this corporate life might be held to be a disadvantage, as tending to curiosity, impertinent comment, or gossip, but the diversity of occupation and interest of a mixed student body renders this result highly improbable.

In a residence hall directed by an educational institution, physical and aesthetic conditions may be effectively controlled, and it is not too much to claim that their ethical value is so great as to justify their careful consideration by competent authorities.

It might be inferred from what has been said, that the argument from economy has no

place in this statement of the function which a college home should perform. Quite the contrary! While it is true that such educational returns cannot be secured without cost, there is a real economy in the investment, or, to put the statement another way, there is great waste in failing to make the investment. This investment means meeting the expense of the architectural, domestic, and social devices, which make practicable on the impersonal side all the conditions suggested, and the provision of wise and sympathetic leadership, by which the discipline gained in the classroom, the library, and the laboratory may be made a part of the daily living of every individual.

Not to make it means the failure to provide just the opportunity to acquire that power of expression, that facility in social intercourse, that ability to meet situations of an unusual and unexpected character, that dignity and poise, which insure that the intellectual and scholarly results of the academic experience will be made available in full measure.

Whether these influences will be completely realized or not will depend largely on whether the intellectual interests which are the basis for this collective life are given opportunity to contribute to the life of the student. If in any

institution the women have less than full recognition in the intellectual privileges, if there are not women in faculty and administrative positions of high rank, if the attitude either of faculty or of men students toward the intellectual life of the women is patronizing instead of friendly, neither college hall nor any other device can make good the damage so wrought. Freedom in the generous restraint of family life can contribute to intellectual self-respect; it can never be a substitute for the self-control and dignity growing out of the realization on the part of the individual that she shares with full and equal freedom in the intellectual wealth of the group in which she is for the time a member.

No claim is made that results of great value often analogous to those described may not be secured in the private boarding-house or the sorority headquarters, and in many institutions which have failed to realize their opportunity in this direction, these substitutes have been of great service; but the assumption of this duty by the college is, of course, the only way in which the enjoyment of these privileges can be assured to any considerable number of the student body, and particularly to those who are most in need of it.

Just as in the daily life of the home, the prin-

ciples not only of right living, but of righteous living, must be translated into terms of habit, so in the college substitute for the home, there must be large opportunities for fine appreciation of the rights of others, delicate feeling for the needs of others, and an ever-widening sympathy, not only with the truths of nature and the facts of history, but with the frailties and the aspirations of human nature. It is from the natural relationships and problems of simple everyday life that there may be secured the fine democracy and social power demanded of the educated woman of today.

CHAPTER XX

EDUCATIONAL NEEDS OF COLLEGE WOMEN

The preceding chapters have described the duties, responsibilities, and interests which women are assuming or which society is demanding they should carry under the present order. Together with this demand there is a constantly deepening conviction of the necessity of giving to every girl the chance to make the most of her individual powers in every respect. Here and there the tyranny of tradition exists and is very powerful in its influence. But gradually the world of thinking, active men and women is breaking away from this thraldom and recognizing the right of girls to be developed most completely and perfectly in order to enter into the fullest enjoyment of the benefits of the world's progress and to share in making that progress as speedy and as rich as it lies within human power to make it.

The response which the educational system is making to this demand has briefly been suggested in previous chapters. The necessity of various kinds of training is gradually receiving recognition. The welfare of the girl requires that

attention should be paid to her physical, intellectual, aesthetic, social, domestic, economic, and spiritual needs. She must know how to maintain her body in health and efficiency; she must acquire knowledge both for actual use and enjoyment and as a means of mental discipline and growth; she must be able to appreciate beauty; she must know how to exercise her social instinct as friend, in the service of the weak, and as citizen; she must understand the value of domestic relations as wife, mother, household manager, and director of consumption; she must be fitted to be of economic value; she must have her spiritual needs, her sense of righteousness, developed and satisfied.

In the preceding chapters these kinds of training have been discussed to some extent separately, although a moment's reflection shows that so arbitrary a division cannot long be maintained. The ethical and spiritual training, for example, cannot very well be divorced from the intellectual and social. In any rational system, the training must be looked upon as one process unifying all the powers of the individual rather than developing certain ones at the expense of others.

There seems little ground to doubt from the evidence which has been given that the public-

school system is rapidly adjusting itself to meet the educational requirements of the girl. The question is often raised as to whether the college is similarly fulfilling its functions at the later period of the girl's life. There is much evidence that it is not. The prevailing dissatisfaction with the men's college experience is rapidly finding expression in regard to the women's college experience as well. It is a matter of common observation among women college graduates that the number of those who have daughters and have decided not to send them to college seems to be increasing. A study of what the college training offers in the light of what the woman of today needs reveals serious lack of adaptation in many respects and shows that the results of the college experience in knowledge, in culture, and in efficiency are too often meager in comparison with the outlay of time, money, effort, and resources.

The following summary is given of the changes which seem necessary if the four years of college life are to perform any real function in the education of a woman:

1. The reconstruction of the physical training department, and an enlargement of its scope.

2. The modification of the social and domestic features of the college life.

3. The development of the professional or expert attitude of mind on the part of the student.

4. The extension of personal relations between the faculty and the students outside of the classroom.

5. The appointment of trained and practical experts in education to advise as to courses of study and methods of work and life.

6. The introduction of new courses of study.

7. A juster recognition of women in academic and intellectual fields.

1. In more intelligently recognizing the necessity of laying a proper physical basis in order to secure the highest efficiency of its students, the college would join in the general movement for the conservation of natural resources. As, by the restriction of the labor of women and children in workshops and factories and by the reforesting of denuded land, early forms of wastefulness are replaced by new economies, so, by adequate training of students' bodies, normal and healthy mechanisms are developed to their full capacity, and increased serviceability can be the only result.

2. The modification of the social and domestic features of the college life will naturally be determined by environment, resources, and

other varying factors. The general principle to be recognized is that intellectual life of the highest order cannot in these times be divorced from human relationships. The scholar needs above all others to learn quickly and effectively how to make these relationships a source of help and not of irritation and friction to herself and to others.

3. The factors which influence the choice of studies in college have been shown in a previous chapter to be greatly diversified. There is no dominating purpose in the life of most young college women of today, and the quality of their work shows the lack of it. The same fact is true of women in general. They do not set before themselves goals which they intend to reach or aims which they are eager to fulfil. The reason is chiefly that society expects women to be "casual" in their interests and work; they drift into a vocation, even that of matrimony, without special preparation, and are for the most part unskilled in industry and in all the activities which claim their interest. The awakening within the young college woman of the professional spirit and the fixing of the expert attitude of mind would not only result in untold benefit to her individually, but would react and have great influence on vast numbers of women

in other fields of work. As a first step in this process, every college student on entering should be required to state her reason for going to college. It is true that she might be able to give only a trivial reason, as for example to have a good time or because she had not anything else to do, but the very formulation of the reason should be in itself a step forward in her power to control and direct her interests. For the "major subject" required by the curriculum, the student should substitute her "major object," and be allowed to take any course which can be shown to bear rationally upon it.

Departmental barriers will break down, and knowledge become unified. Under wise direction she will see that even a trivial object bears with it serious and interesting implications and compels the training of the power to solve problems. Every college teacher knows how a student's spirit is illumined when she begins to see the relation of her work to her life, how industry takes the place of indolence, and enthusiasm replaces indifference. She feels her own powers as an individual, her own importance to society, and the value of the special service she is to render, and the young woman who fails to react under these stimuli has no place in college.

By the end of the first year a specific vocation should be chosen. This may be that of a scholar, a professional woman, a housekeeper, or even frankly a wife and mother. Whatever it may be, the choice need not be considered as final. The attitude of mind is the desirable point. Nor should the training become too specialized. The use of the college years as a time for laying foundations deep and strong should be emphasized carefully, and the large social value of the well-trained woman be pointed out.

4. The full purport of the suggestion that closer personal relations between the faculty and the students are at least as valuable and estimable as highly specialized investigations can hardly be estimated. It would involve a very complete change of attitude on the part of many who are now teaching in colleges, especially in those somewhat remote from large centers of intellectual interests. With occasional "little journeys" into the world, the college and its human components would be found to be not only not "deadly monotonous," but full of shifting problems whose solution demands the keenest powers of intellect and sympathy and gives the highest rewards and satisfactions. No field of research offers so effective returns

as the body of college women with their needs, enthusiasms, and aspirations, and sometimes even their crudities and dullnesses.

5. An essential feature of any plan designed to promote the student's efficiency and develop her personality by means of an educational system is a thoroughly qualified and trained adviser. Such an officer should be competent to adjust the resources of the institution to the needs of the student rather than be satisfied, as is too often the case, with efforts to adjust the student to the institution. He, or possibly even she, should be a vocational counselor having a wide range of general knowledge and culture, thorough appreciation of high scholarship, sound comprehension of the significance of a "liberal education," and specific information concerning the methods and subject-matter of courses offered as well as concerning the training, purposes, and needs of the individual students. An officer with such duties and opportunities would be able to establish the realization of personality which is often lacking in large institutions,[1] and could also give important help in suggesting lines along which existing resources should be modified or future

[1] Pearl Louise Weber, "The University and Personality," *The University of Chicago Magazine*, January, 1910.

ones established. The enormous waste of money and ability which exists too generally in duplicated courses or in parallel courses which should be interrelated would be discovered through such an agency.

6. The demand for the introduction of new courses of study has been made in many instances by women graduates as well as by those interested in the problem as college administrators. An interesting illustration of this demand will be found in the following outline of courses to be introduced into the college curriculum which was recommended recently by a committee appointed by the New York Branch of the Association of Collegiate Alumnae. It indicates the general scope of the subjects which women graduates think are necessary. Such courses would serve to introduce the scientific method into the vocation which most needs it, that of directing household and family life.[1] A portion of the subject-matter described is already included in the courses offered by some colleges

[1] "The need for introducing into college more material of a vocational sort and conversely of permeating woman's vocational work of all kinds with a scientific method and a broadly human interest is likely to become increasingly evident. The work of the woman in the home has lagged far behind the occupations of men in point of organization and of the use of scientific method. An educated woman is apt to feel vaguely that the whole household life—once the center of all the industries and the place

and universities, as, for example, the University of Chicago.

I. *Personal hygiene and its social and ethical relations.*—Required for all students. One hour a week for the first year, first half. To count toward a degree, and to require an examination. The course is to be given by a person of training and reputation.

II. *Hygiene of environment.*—Required for all students. One hour a week the second half of the first year. Laboratory or field work in the community, or some suitable place. This course is to be given by a well-known authority on the subject. Courses I and II need not be given by members of the faculty of the institution.

III. *General biology and bacteriology.*—Required for all students. Two hours a week for one year; half the time to each subject.

IV. *Hygiene of childhood.*—Elective. Open to juniors and seniors. Two hours a week for one half-year. Prerequisites: General biology and bacteriology. This course treats the subject from the biological point of view, and includes the following topics: heredity and environment; growth and development of the child from the physical, mental, and moral aspects; the special hygiene of adolescence. The laboratory work for this course should involve a study of the children in the schools, on the playgrounds, and in the industries, and

where discovery and invention had their chief seat—has now been left behind in the progress of civilization and is no longer a field for the exercise of intellectual powers of the highest order. This inevitably tends to depreciation of such occupation and to strain in the family life."—James H. Tufts, "American College Life and Education," *Science*, Vol. XXIX, p. 407.

of the effect of the physical conditions upon the mental and moral development of the child.

V. *The family.*—Elective. Open to juniors and seniors. Two hours a week for one half-year. Prerequisites: General sociology and economics. This course treats of the historical development of the family; the biological significance of the family; the social, legal, and ethical aspects of the family; the economics of consumption in the home.

VI. *A short law course.*—Required for all students. One hour a week for one year, or its equivalent. This course covers contracts, real property, personal property, banking, and social and domestic relations.

VII. *Political science.*—Elective without prerequisites. This course deals with the organization and function of government, general and local; politics and political principles.

VIII. *History of industries and the status of women in industry.*

Further, the committee recommends that the problems of consumption be emphasized in courses in chemistry and economics; and that the heads of college residence halls be persons capable of making the hall a laboratory for scientific housekeeping, for social, aesthetic, and moral training, and that they be members of the faculty.

7. The attitude of the governing boards of educational institutions toward women is a subject which merits consideration, as it influences more widely than might be supposed the woman student in relation to her intellectual life.

"Pure" scholarship may be something to be highly prized; "true" scholarship is something which every intelligent woman honors; but in these days the quest for learning has to be made in the light of the practical issues of life. Few men and still fewer women are free to plan for an intellectual life apart from bread-winning. Here the conditions for women are not hazards: they are stubborn and disheartening facts. Salaries for women school-teachers are avowedly small, disproportionately small as compared with those of men; many subjects they are not permitted to teach, and many positions are closed to them because of their sex.

Scholarships and fellowships are but sparingly granted, although according to every known test that has been used to measure scholarship in different institutions—examinations, class records, election to Phi Beta Kappa—women hold at least equal rank with men. On college faculties, with rare exceptions, they are placed only in the lowest ranks. Of the 1,389 women holding instructional positions in the 321 co-educational colleges and universities, very few are of professorial grade. The facts at the University of Wisconsin are fairly typical. In the announcement for 1909 there are 3 women holding professorships (all, however,

of the third grade, viz., assistant professorship), and 171 men. Below the professorial grade, viz., instructors, assistants, etc., are 15 women and 192 men. If the proportions were the same in both classes, there should be 12 women instead of 3 in the professorial ranks. Moreover, an inspection of the records over a period of years shows that the promotion of women is much slower than that of men. Even allowing for alleged differences in capacity and availability, the discrepancy in academic treatment is unjustifiable. It is time that the full facts should be made known and some of the needless barriers removed from the path of women scholars.

These suggestions have been made in the belief that most American college women are intelligent and responsive and eager to fit themselves in the best possible way to meet their duties and responsibilities. It is not their fault if in many cases when they leave the college they are not learned, educated, cultured, or efficient. New aims must be followed and new methods adopted if the college course is to be completely justified as a part of the educational system.

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